



NASA SP-7039(09)

Section 2

Indexes

NASA

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Section 2 • Indexes

JULY 1976

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ACCESSION NUMBER RANGES

<i>Bibliography Number</i>	<i>STAR Accession Numbers</i>
NASA SP-7039(04)	N69-20701—N73-33931
NASA SP-7039(05)	N74-10001—N74-21629
NASA SP-7039(06)	N74-21630—N74-35363
NASA SP-7039(07)	N75-10001—N75-21218
NASA SP-7039(08)	N75-21219—N75-34001
NASA SP-7039(09)	N76-10001—N76-22149

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NASA

PATENT
ABSTRACTS
BIBLIOGRAPHY

A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

Indexes for the annotated references to NASA-owned inventions covered by U.S. patents and applications for patent that were announced in *Scientific and Technical Aerospace Reports (STAR)* between May 1969 and June 1976. This issue supersedes all previous Index Sections.



Scientific and Technical Information Office
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JULY 1976

Washington, D.C.

This Supplement is available from the National Technical Information Service (NTIS), Springfield, Virginia 22161, for \$5.00. For copies mailed to addresses outside the United States, add \$2.50 per copy for handling and postage.

INTRODUCTION

Several thousand inventions result each year from the aeronautical and space research supported by the National Aeronautics and Space Administration. The inventions having important use in government programs or significant commercial potential are usually patented by NASA. These inventions cover practically all fields of technology and include many that have useful and valuable commercial application.

NASA inventions best serve the interests of the United States when their benefits are available to the public. In many instances, the granting of nonexclusive or exclusive licenses for the practice of these inventions may assist in the accomplishment of this objective. This bibliography is published as a service to companies, firms, and individuals seeking new, licensable products for the commercial market.

The *NASA Patent Abstracts Bibliography (NASA PAB)* is a semiannual NASA publication containing comprehensive abstracts and indexes of NASA-owned inventions covered by U.S. patents and applications for patent. The citations included in *NASA PAB* were originally published in NASA's *Scientific and Technical Aerospace Reports (STAR)* and cover *STAR* announcements made since May 1969.

For the convenience of the user, each issue of *NASA PAB* has a separately bound Abstract Section (Section 1) and Index Section (Section 2). Although each Abstract Section covers only the indicated six-month period, the Index Section is cumulative covering all NASA-owned inventions announced in *STAR* since May 1969. Thus a complete set of *NASA PAB* would consist of the Abstract Section of Issue 04 (January 1974), the Abstract Section for all subsequent issues, and the Index Section for the most recent issue.

The 200 citations published in this issue of the Abstract Section cover the period January 1976 through June 1976. The Index Section contains references to the 2994 citations covering the period May 1969 through June 1976.

ABSTRACT SECTION (SECTION 1)

This *PAB* issue incorporates the 1975 *STAR* category revisions which include 10 major subdivisions divided into 74 specific categories and one general category/division. (See Table of Contents for the scope note of each category under which are grouped appropriate NASA inventions.) This new scheme was devised in lieu of the 34 category divisions which were utilized in *PAB* supplements (01) through (06) covering *STAR* abstracts from May 1969 through January 1974. Each entry in the Abstract Section consists of a *STAR* citation accompanied by an abstract and a key illustration taken from the patent or application for patent drawing. Entries are arranged in subject category in order of the ascending NASA Accession Number originally assigned in *STAR* to the invention. The range of NASA Accession Numbers within each issue is printed on the inside front cover.

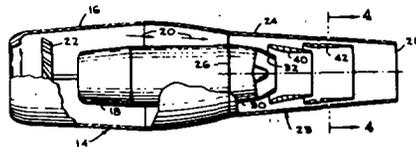
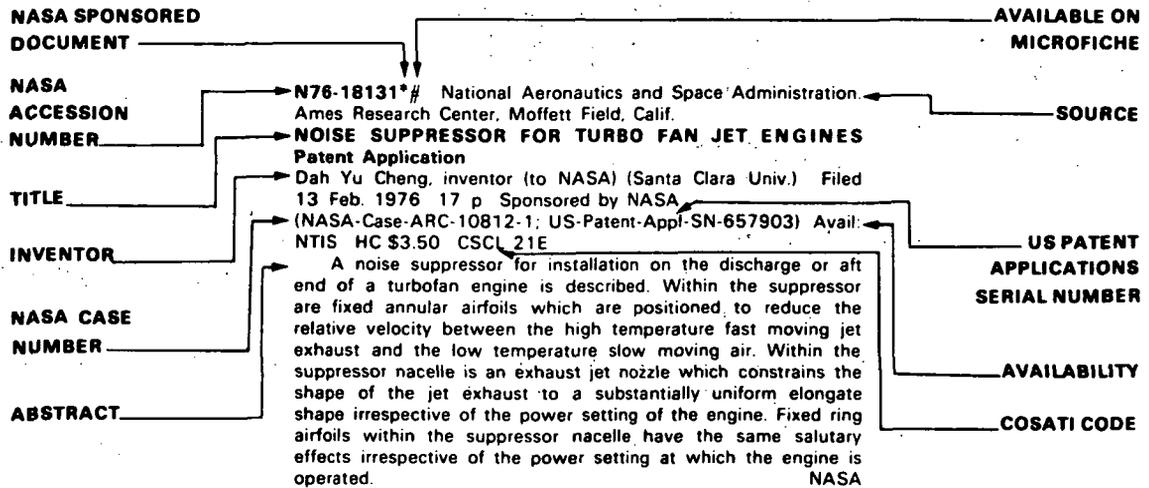
Abstract Citation Data Elements: Each of the abstract citations has several data elements useful for identification and indexing purposes, as follows:

NASA Accession Number
NASA Case Number
Inventor's Name

Title of Invention
 U.S. Patent Application Serial Number
 U.S. Patent Number (for issued patents only)
 U.S. Patent Office Classification Number(s)
 (for issued patents only)

These data elements in the citation of the abstract as depicted in the Typical Citation and Abstract reproduced below and are also used in the several indexes.

TYPICAL CITATION AND ABSTRACT



KEY ILLUSTRATION

INDEX SECTION(SECTION 2)

The Index Section is divided into five indexes which are cross-indexed and are useful in locating a single invention or groups of inventions.

Each of the five indexes utilizes basic data elements: (1) Subject Category Number, (2) NASA Accession Number, and (3) NASA Case Number, in addition to other specific index terms.

Subject Index: Lists all inventions according to appropriate alphabetized technical term and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Inventor Index: Lists all inventions according to alphabetized names of inventors and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Source Index: Lists all inventions according to alphabetized source of invention (i.e., name of contractor or government installation where invention was made) and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Number Index: Lists inventions in order of ascending (1) NASA Case Number, (2) U.S. Patent Application Serial Number, (3) U.S. Patent Classification Number, and (4) U.S. Patent Number and indicates the related Subject Category Number and the NASA Accession Number.

Accession Number Index: Lists all inventions in order of ascending NASA Accession Number and indicates the related Subject Category Number, the NASA Case Number, the U.S. Patent Application Serial Number, the U.S. Patent Classification Number, and the U.S. Patent Number.

HOW TO USE THIS PUBLICATION TO IDENTIFY NASA INVENTIONS

To identify one or more NASA inventions within a specific technical field or subject, several techniques are possible when using the flexibility incorporated into the *NASA PAB*.

(1) *Using Subject Category:* To identify all NASA inventions in any one of the subject categories in this issue of *NASA PAB*, select the desired Subject Category in the Abstract Section (Section 1) and find the inventions abstracted thereunder. For previous *NASA PAB* issues, the Tables of Contents to Section 2 should be examined as the Subject categories were changed beginning with *NASA PAB (07)*.

(2) *Using Subject Index:* To identify all NASA inventions listed under a desired technical subject index term, (A) turn to the cumulative Subject Index in the Index Section and find the invention(s) listed under the desired technical subject term. (B) Note the indicated Accession Number and the Subject Category Number. (C) Using the indicated Accession Number, turn to the inside front cover of the Index Section to determine which issue of the Abstract Section includes the Accession Number desired. (D) To find the abstract of the particular invention in the issue of the Abstract Section selected, (i) use the Subject Category Number to locate the Subject Category and (ii) use the Accession Number to locate the desired invention within the Subject Category listing.

(3) *Using Patent Classification Index:* To identify all inventions covered by issued NASA patents (does not include applications for patent) within a desired Patent Office Classification, (A) turn to the Patent Classification Number in the Number Index of Section 2 and find the associated inventions(s), and (B) follow the instructions outlined in (2)(B), and (D) above.

PUBLIC AVAILABILITY OF COPIES OF PATENTS AND PATENT APPLICATIONS

Copies of U.S. patents may be purchased directly from the U.S. Patent Office, Washington, D.C. 20231, for fifty cents a copy.

Copies of pending NASA applications for patent abstracted in *NASA PAB* are sold by the National Technical Information Service, Springfield, Virginia 22161, at the price shown in the citation. Microfiche are sold at the established unit price of \$2.25. When ordering copies of an application for patent from NTIS, the U.S. Patent Application Serial Number listed in the index or shown in the citation for each abstract should be used to identify the desired application for patent.

LICENSES FOR COMMERCIAL USE: INQUIRIES AND APPLICATIONS FOR LICENSE

NASA inventions, abstracted in *NASA PAB*, are available for nonexclusive or exclusive licensing in accordance with the NASA Patent Licensing Regulations. It is significant that all licenses for NASA inventions shall be by express written instruments and that no license will be granted or implied in a NASA invention except as provided in the NASA Patent Licensing Regulations.

Inquiries concerning the NASA Patent Licensing Program or the availability of licenses for the commercial use of NASA-owned inventions covered by U.S. patents or pending applications for patent should be forwarded to the NASA Patent Counsel of the NASA installation having cognizance of the specific invention, or the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D.C. 20546. Inquiries should refer to the NASA Case Number, the Title of the Invention, and the U.S. Patent Number or the U.S. Application Serial Number assigned to the invention as shown in *NASA PAB*.

The NASA Patent Counsel having cognizance of the invention is determined by the first three letters or prefix of the NASA Case Number assigned to the invention. The addresses of NASA Patent Counsels are listed alongside the NASA Case Number prefix letters in the following table. Formal application of license must be submitted on the NASA Form, Application for NASA Patent License, which is available upon request from any NASA Patent Counsel.

**NASA Case
Number
Prefix Letters**

**Address of Cognizant
NASA Patent Counsel**

ARC-xxxxx
XAC-xxxxx

Ames Research Center
Mail Code: 200-11A
Moffett Field, California 94035
Telephone: (415)965-5104

ERC-xxxxx
XER-xxxxx
HQN-xxxxx
XHQ-xxxxx

NASA Headquarters
Mail Code: GP
Washington, D.C. 20546
Telephone: (202)755-3954

GSC-xxxxx
XGS-xxxxx

Goddard Space Flight Center
Mail Code: 204
Greenbelt, Maryland 20771
Telephone: (301)982-2351

KSC-xxxxx
XKS-xxxxx

John F. Kennedy Space Center
Mail Code: AA-PAT
Kennedy Space Center, Florida 32899
Telephone: (305)867-2544

LAR-xxxxx
XLA-xxxxx

Langley Research Center
Mail Code: 456
Langley Station
Hampton, Virginia 23365
Telephone: (804)827-3725

LEW-xxxxx
XLE-xxxxx

Lewis Research Center
Mail Code: 500-311
21000 Brookpark Road
Cleveland, Ohio 44135
Telephone: (216)433-6346

MSC-xxxxx
XMS-xxxxx

Lyndon B. Johnson Space Center
Mail Code: AM
Houston, Texas 77058
Telephone: (713)483-4871

MFS-xxxxx

George C. Marshall Space Flight
Center

XMF-xxxxx

Mail Code: CC01
Huntsville, Alabama 35812
Telephone: (205)453-0020

NPO-xxxxx
XNP-xxxxx
FRC-xxxxx
XFR-xxxxx
WOO-xxxxx

NASA Resident Legal Office
Mail Code: 180-601
4800 Oak Grove Drive
Pasadena, California 91103
Telephone: (213)354-2700

Title 14—AERONAUTICS AND SPACE

Chapter V—National Aeronautics and Space Administration

PART 1245—PATENTS

Subpart 2—Patent Licensing Regulations

1. Subpart 2 is revised in its entirety as follows:

Sec.	
1245.200	Scope of subpart.
1245.201	Definitions.
1245.202	Basic considerations.
1245.203	Licenses for practical application of inventions.
1245.204	Other licenses.
1245.205	Publication of NASA inventions available for license.
1245.206	Application for nonexclusive license.
1245.207	Application for exclusive license.
1245.208	Processing applications for license.
1245.209	Royalties and fees.
1245.210	Reports.
1245.211	Revocation of licenses.
1245.212	Appeals.
1245.213	Litigation.
1245.214	Address of communications.

AUTHORITY: The provisions of this Subpart 2 issued under 42 U.S.C. 2457, 2473 (b) (3).

§ 1245.200 Scope of subpart.

This Subpart 2 prescribes the terms, conditions, and procedures for licensing inventions covered by U.S. patents and patent applications for which the Administrator of the National Aeronautics and Space Administration holds title on behalf of the United States.

§ 1245.201 Definitions.

For the purpose of this subpart, the following definitions apply:

(a) "Invention" means an invention covered by a U.S. patent or patent application for which the Administrator of NASA holds title on behalf of the United States and which is designated by the Administration as appropriate for the grant of license(s) in accordance with this subpart.

(b) "To practice an invention" means to make or have made, use or have used, sell or have sold, or otherwise dispose of according to law any machine, article of manufacture or composition of matter physically embodying the invention, or to use or have used the process or method comprising the invention.

(c) "Practical application" means the manufacture in the case of a composition of matter or product, the use in the case of a process, or the operation in the case of a machine, under such conditions as to establish that the invention is being utilized and that its benefits are reasonably accessible to the public.

(d) "Special invention" means any invention designated by the NASA Assistant General Counsel for Patent Matters to be subject to short-form licensing procedures. An invention may be designated as a special invention when a determination is made that:

(1) Practical application has occurred and is likely to continue for the life of

the patent and for which an exclusive license is not in force, or

(2) The public interest would be served by the expeditious granting of a nonexclusive license for practice of the invention by the public.

(e) The "Administrator" means the Administrator of the National Aeronautics and Space Administration, or his designee.

(f) "Government" means the Government of the United States of America.

(g) The "Inventions and Contributions Board" means the NASA Inventions and Contributions Board established by the Administrator of NASA within the Administration in accordance with section 305 of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457).

§ 1245.202 Basic considerations.

(a) Much of the new technology resulting from NASA sponsored research and development in aeronautical and space activities has application in other fields. NASA has special authority and responsibility under the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2451), to provide for the widest practical dissemination and utilization of this new technology. In addition, NASA has been given unique requirements to protect the inventions resulting from NASA activities and to promulgate licensing regulations to encourage commercial use of these inventions.

(b) NASA-owned inventions will best serve the interests of the United States when they are brought to practical application in the shortest time possible. Although NASA encourages the non-exclusive licensing of its inventions to promote competition and achieve their widest possible utilization, the commercial development of certain inventions calls for a substantial capital investment which private manufacturers may be unwilling to risk under a nonexclusive license. It is the policy of NASA to seek exclusive licensees when such licenses will provide the necessary incentive to the licensee to achieve early practical application of the invention.

(c) The Administrator, in determining whether to grant an exclusive license, will evaluate all relevant information submitted by applicants and all other persons and will consider the necessity for further technical and market development of the invention, the capabilities of prospective licensees, their proposed plans to undertake the required investment and development, the impact on competitors, and the benefits of the license to the Government and to the public. Preference for exclusive license shall be given to U.S. citizens or companies who intend to manufacture or use, in the case of a process, the invention in the United States of America, its territories and possessions. Consideration may also be given to assisting small businesses and minority business enterprises, as well as economically depressed, low income and labor surplus areas.

(d) All licenses for inventions shall

be by express written instruments. No license shall be granted either expressly or by implication, for a NASA invention except as provided for in §§ 1245.203 and 1245.204 and in any existing or future treaty or agreement between the United States and any foreign government.

(e) Licenses for inventions covered by NASA-owned foreign patents and patent applications shall be granted in accordance with the NASA Foreign Patent Licensing Regulations (§ 1245.4).

§ 1245.203 Licenses for practical application of inventions.

(a) *General.* As an incentive to encourage practical application of inventions, licenses will be granted to responsible applicants according to the circumstances and conditions set forth in this section.

(b) *Nonexclusive licenses.* (1) Each invention will be made available to responsible applicants for nonexclusive, revocable licensing in accordance with § 1245.206, consistent with the provisions of any existing exclusive license.

(2) The duration of the license shall be for a period as specified in the license.

(3) The license shall require the licensee to achieve the practical application of the invention and to then practice the invention for the duration of the license.

(4) The license may be granted for all or less than all fields of use of the invention and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(5) The license shall extend to the subsidiaries and affiliates of the licensee and shall be nonassignable without approval of the Administrator, NASA, except to the successor of that part of the licensee's business to which the invention pertains.

(c) *Short-form nonexclusive licenses.* A nonexclusive, revocable license for a special invention, as defined in § 1245.201 (d), shall be granted upon written request, to any applicant by the Patent Counsel of the NASA Installation having cognizance of the invention.

(d) *Exclusive licenses.* (1) A limited exclusive license may be granted on an invention available for such licensing provided that:

(i) The Administrator has determined that: (a) The invention has not been brought to practical application by a nonexclusive licensee in the fields of use or in the geographical locations covered by the application for the exclusive license, (b) practical application of the invention in the fields of use or geographical locations covered by the application for the exclusive license is not likely to be achieved expeditiously by the further funding of the invention by the Government or under a nonexclusive license requested by any applicant pursuant to these regulations, and (c) the exclusive license will provide the necessary incentive to the licensee to achieve the practical application of the invention; and

(ii) Either a notice pursuant to

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§ 1245.205 listing the invention as available for licensing has been published in the FEDERAL REGISTER for at least 9 months; or a patent covering the invention has been issued for at least 6 months. However, a limited exclusive license may be granted prior to the periods specified above if the Administrator determines that the public interest will best be served by the earlier grant of an exclusive license.

(2) The license may be granted for all or less than all fields of use of the invention, and throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(3) The exclusive period of the license shall be negotiated, but shall be for less than the terminal portion of the patent, and shall be related to the period necessary to provide a reasonable incentive to invest the necessary risk capital.

(4) The license shall require the licensee to practice the invention within a period specified in the license and then to achieve practical application of the invention.

(5) The license shall require the licensee to expend a specified minimum sum of money and/or to take other specified actions, within indicated period(s) after the effective date of the license, in an effort to achieve practical application of the invention.

(6) The license shall be subject to at least an irrevocable royalty-free right of the Government of the United States to practice and have practiced the invention throughout the world by or on behalf of the Government of the United States and on behalf of any foreign government pursuant to any existing or future treaty or agreement with the United States.

(7) The license may reserve to the Administrator, NASA, under the following circumstances, the right to require the granting of a sublicense to responsible applicant(s) on terms that are considered reasonable by the Administrator, taking into consideration the current royalty rates under similar patents and other pertinent facts: (i) To the extent that the invention is required for public use by Government regulation, or (ii) as may be necessary to fulfill health or safety needs, or (iii) for other purposes stipulated in the license.

(8) The license shall be nontransferable except to the successor of that part of the licensee's business to which the invention pertains.

(9) Subject to the approval of the Administrator, the licensee may grant sublicenses under the license. Each sublicense granted by an exclusive licensee shall make reference to and shall provide that the sublicense is subject to the terms of the exclusive license including the rights retained by the Government under the exclusive license. A copy of each sublicense shall be furnished to the Administrator.

(10) The license may be subject to such other reservations as may be in the public interest.

§ 1245.204 Other licenses.

(a) *License to contractor.* There is

hereby granted to the contractor reporting an invention made in the performance of work under a contract of NASA in the manner specified in section 305(a) (1) or (2) of the National Aeronautics and Space Act of 1958 as amended (42 U.S.C. 2457(a) (1) or (2)), a revocable, nonexclusive, royalty-free license for the practice of such invention, together with the right to grant sublicenses of the same scope to the extent the contractor was legally obligated to do so at the time the contract was awarded. Such license and right is nontransferable except to the successor of that part of the contractor's business to which the invention pertains.

(b) *Miscellaneous licenses.* Subject to any outstanding licenses, nothing in this subpart 2 shall preclude the Administrator from granting other licenses for inventions, when he determines that do so would provide for an equitable distribution of rights. The following exemplify circumstances wherein such licenses may be granted:

(1) In consideration of the settlement of an interference;

(2) In consideration of a release of a claim of infringement; or

(3) In exchange for or as part of the consideration for a license under adversely held patent(s).

§ 1245.205 Publication of NASA inventions available for license.

(a) A notice will be periodically published in the FEDERAL REGISTER listing inventions available for licensing. Abstracts of the inventions will also be published in the NASA Scientific and Technical Aerospace Reports (STAR) and other NASA publications.

(b) Copies of pending patent applications for inventions abstracted in STAR may be purchased from the National Technical Information Service, Springfield, Va. 22151.

§ 1245.206 Application for nonexclusive license.

(a) *Submission of application.* An application for nonexclusive license under § 1245.203(b) or a short-form nonexclusive license for special inventions under § 1245.203(c) shall be addressed to the NASA Patent Counsel of the NASA installation having cognizance over the NASA invention for which a license is desired or to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for nonexclusive license.* An application for nonexclusive license under § 1245.203(b) shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number of patent number, title and date, if known;

(2) Name and address of the person, company or organization applying for license and whether the applicant is a U.S. citizen or a U.S. corporation;

(3) Name and address of representative of applicant to whom correspondence should be sent;

(4) Nature and type of applicant's business;

(5) Number of employees;

(6) Purpose for which license is desired;

(7) A statement that contains the applicant's best knowledge of the extent to which the invention is being practiced by private industry and the Government;

(8) A description of applicant's capability and plan to undertake the development and marketing required to achieve the practical application of the invention, including the geographical location where the applicant plans to manufacture or use, in the case of a process, the invention; and

(9) A statement indicating the minimum term of years the applicant desires to be licensed.

(c) *Contents of an application for a short-form nonexclusive license.* An application for a short-form nonexclusive license under § 1245.203(c) for a special invention shall include:

(1) Identification of invention for which license is desired, including the NASA patent case number, patent application serial number or patent number, title and date, if known;

(2) Name and address of company or organization applying for license; and

(3) Name and address of representative of applicant to whom correspondence should be sent.

§ 1245.207 Application for exclusive license.

(a) *Submission of application.* An application for exclusive license under § 1245.203(d) may be submitted to NASA at any time. An application for exclusive license shall be addressed to the NASA Assistant General Counsel for Patent Matters.

(b) *Contents of an application for exclusive license.* In addition to the requirements set forth in § 1245.206(b), the application for an exclusive license shall include:

(1) Applicant's status, if any, in any one or more of the following categories:

(i) Small business firm;

(ii) Minority business enterprise;

(iii) Location in a surplus labor area;

(iv) Location in a low-income urban area; and

(v) Location in an area designed by the Government as economically depressed.

(2) A statement indicating the time, expenditure, and other acts which the applicant considers necessary to achieve practical application of the invention, and the applicant's offer to invest that sum and to perform such acts if the license is granted;

(3) A statement whether the applicant would be willing to accept a license for all or less than all fields of use of the invention throughout the United States of America, its territories and possessions, Puerto Rico, and the District of Columbia, or in any lesser geographic portion thereof.

(4) A statement indicating the amount of royalty fees or other consideration, if any, the applicant would be willing to pay the Government for the exclusive license; and

(5) Any other facts which the applicant believes to show it to be in the interests of the United States of America for the Administrator to grant an exclusive license rather than a nonexclusive li-

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cense and that such an exclusive license should be granted to the applicant.

§ 1245.208 Processing applications for license.

(a) *Initial review.* Applications for nonexclusive and exclusive licenses under §§ 1245.206 and 1245.207 will be reviewed by the Patent Counsel of the NASA installation having cognizance for the invention and the NASA Assistant General Counsel for Patent Matters, to determine the conformity and appropriateness of the application for license and the availability of the specific invention for the license requested. The Assistant General Counsel for Patent Matters will forward all applications for license conforming to §§ 1245.206(b) and 1245.207(b) to the NASA Inventions and Contributions Board when the invention is available for consideration of the requested license. Prior to forwarding applications for exclusive licenses to the Inventions and Contributions Board, notice in writing will be given to each nonexclusive licensee for the specific invention advising of the receipt of the application for the exclusive license and providing each nonexclusive licensee with a 30-day period for submitting either evidence that practical application of the invention has occurred or is about to occur or, an application for an exclusive license for the invention.

(b) *Recommendations of Inventions and Contributions Board.* The Inventions and Contributions Board shall, in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, evaluate all applications for license forwarded by the Assistant General Counsel for Patent Matters. Based upon the facts presented to the Inventions and Contributions Board in the application and any other facts in its possession, the Inventions and Contributions Board shall recommend to the Administrator: (1) Whether a nonexclusive or exclusive license should be granted, (2) the identity of the licensee, and (3) any special terms or conditions of the license.

(c) *Determination of Administrator and grant of nonexclusive licenses.* The Administrator shall review the recommendations of the Inventions and Contributions Board and shall determine whether to grant the nonexclusive license as recommended by the Board. If the Administrator determines to grant the license, the license will be granted upon the negotiation of the appropriate terms and conditions of the Office of General Counsel.

(d) *Determination of Administrator and grant of exclusive licenses—(1) Notice.* If the Administrator determines that the best interest of the United States will be served by the granting of an exclusive license in accordance with the basic considerations set forth in §§ 1245.202 and 1245.203, a notice shall be published in the FEDERAL REGISTER announcing the intent to grant the exclusive license, the identification of the invention, special terms or conditions of the proposed license, and a statement that NASA will grant the exclusive license unless within 30 days of the publication of such notice the Inventions and Contributions Board receives in writing

any of the following together with supporting documentation:

(i) A statement from any person setting forth reasons why it would not be in the best interest of the United States to grant the proposed exclusive license; or

(ii) An application for a nonexclusive license under such invention, in accordance with § 1245.206(b), in which applicant states that he has already brought or is likely to bring the invention to practical application within a reasonable period.

The Inventions and Contributions Board shall, upon receipt of a written request within the 30 days' notice period, grant an extension of 30 days for the submission of the documents designated above.

(2) *Recommendation of Inventions and Contributions Board.* Upon the expiration of the period required by subparagraph (1) of this paragraph, the Board shall review all written responses to the notice and shall then recommend to the Administrator whether to grant the exclusive license as the Board initially recommended or whether a different form of license, if any, should instead be granted.

(3) *Grant of exclusive licenses.* The Administrator shall review the Board's recommendation and shall determine if the interest of the United States would best be served by the grant of an exclusive license as recommended by the Board. If the Administrator determines to grant the exclusive license, the license will be granted upon the negotiation of the appropriate terms and conditions by the Office of General Counsel.

§ 1245.209 Royalties and fees.

(a) Normally, a nonexclusive license for the practical application of an invention granted to a U.S. citizen or company will not require the payment of royalties; however, NASA may require other consideration.

(b) An exclusive license for an invention may require the payment of royalties, fees or other consideration when the licensing circumstances and the basic considerations in § 1245.202, considered together, indicate that it is in the public interest to do so.

§ 1245.210 Reports.

A license shall require the licensee to submit periodic reports of his efforts to work the invention. The reports shall contain information within his knowledge, or which he may acquire under normal business practice, pertaining to the commercial use that is being made of the invention and such other information which the Administrator may determine pertinent to the licensing program and which is specified in the license.

§ 1245.211 Revocation of licenses.

(a) Any license granted pursuant to § 1245.203 may be revoked, either in part or in its entirety, by the Administrator if in his opinion the licensee at any time shall fail to use adequate efforts to bring to or achieve practical application of the invention in accordance with the terms of the license, or if the licensee at any

time shall default in making any report required by the license, or shall make any false report, or shall commit any breach of any covenant or agreement therein contained, and shall fail to remedy any such default, false report, or breach within 30 days after written notice, or if the patent is deemed unenforceable either by the Attorney General or a final decision of a U.S. court.

(b) Any license granted pursuant to § 1245.204(a) may be revoked, either in part or in its entirety, by the Administrator if in his opinion such revocation is necessary to achieve the earliest practical application of the invention pursuant to an application for exclusive license submitted in accordance with § 1245.207, or the licensee at any time shall breach any covenant or agreement contained in the license, and shall fail to remedy any such breach within 30 days after written notice thereof.

(c) Before revoking any license granted pursuant to this Subpart 2 for any cause, there will be furnished to the licensee a written notice of intention to revoke the license, and the licensee will be allowed 30 days after such notice in which to appeal and request a hearing before the Inventions and Contributions Board on the question of revocation. After a hearing, the Inventions and Contributions Board shall transmit to the Administrator the record of proceedings, its findings of fact, and its recommendation whether the license should be revoked either in part or in its entirety. The Administrator shall review the recommendation of the Board and determine whether to revoke the license in part or in its entirety. Revocation of a license shall include revocation of all sublicenses which have been granted.

§ 1245.212 Appeals.

Any person desiring to file an appeal pursuant to § 1245.211(c) shall address the appeal to Chairman, Inventions and Contributions Board. Any person filing an appeal shall be afforded an opportunity to be heard before the Inventions and Contributions Board, and to offer evidence in support of his appeal. The procedures to be followed in any such matter shall be determined by the Administrator. The Board shall make findings of fact and recommendations with respect to disposition of the appeal. The decision on the appeal shall be made by the Administrator, and such decision shall be final and conclusive, except on questions of law, unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence.

§ 1245.213 Litigation.

An exclusive licensee shall be granted the right to sue at his own expense any party who infringes the rights set forth in his license and covered by the licensed patent. The licensee may join the Government, upon consent of the Attorney General, as a party complainant in such suit, but without expense to the Government and the licensee shall pay costs and any final judgment or decree that may be rendered against the Govern-

PATENT LICENSING REGULATIONS

ment in such suit. The Government shall also have an absolute right to intervene in any such suit at its own expense. The licensee shall be obligated to promptly furnish to the Government, upon request, copies of all pleadings and other papers filed in any such suit and of evidence adduced in proceedings relating to the licensed patent including, but not limited to, negotiations for settlement and agreements settling claims by a licensee based on the licensed patent, and all other books, documents, papers, and

records pertaining to such suit. If, as a result of any such litigation, the patent shall be declared invalid, the licensee shall have the right to surrender his license and be relieved from any further obligation thereunder.

§ 1245.214 Address of communications.

(a) Communications to the Assistant General Counsel for Patent Matters in accordance with §§ 1245.206 and 1245.207 and requests for information concerning licenses for NASA inventions should be

addressed to the Assistant General Counsel for Patent Matters, Code GP, National Aeronautics and Space Administration, Washington, D.C. 20546.

(b) Communications to the Inventions and Contributions Board in accordance with §§ 1245.208, 1245.211, and 1245.212 should be addressed to Chairman, Inventions and Contributions Board, National Aeronautics and Space Administration, Washington, D.C. 20546.

Effective date. The regulations set forth in this subpart 2 are effective April 1, 1972.

JAMES C. FLETCHER,
Administrator.

FOREIGN PATENT LICENSING REGULATIONS

Selected NASA inventions are also available for licensing in countries other than the United States in accordance with the NASA Foreign Patent Licensing Regulation (14 C.F.R. 1245.4), a copy of which is available from any NASA Patent Counsel.

Subject Categories

(1969—1974)

01 Aerodynamics

Includes aerodynamics of bodies, combinations, internal flow in ducts and turbomachinery; wings, rotors, and control surfaces. For applications see: 02 Aircraft and 32 Space Vehicles. For related information see also: 12 Fluid Mechanics; and 33 Thermodynamics and Combustion.

02 Aircraft

Includes fixed-wing airplanes, helicopters, gliders, balloons, ornithopters, etc.; and specific types of complete aircraft (e.g., ground effect machines, STOL, and VTOL); flight tests; operating problems (e.g., sonic boom); safety and safety devices; economics; and stability and control. For basic research see: 01 Aerodynamics. For related information see also: 31 Space Vehicles; and 32 Structural Mechanics.

03 Auxiliary Systems

Includes fuel cells, energy conversion cells, and solar cells; auxiliary gas turbines; hydraulic, pneumatic and electrical systems; actuators; and inverters. For related information see also: 09 Electronic Equipment; 22 Nuclear Engineering; and 28 Propulsion Systems.

04 Biosciences

Includes aerospace medicine, exobiology, radiation effects on biological systems; physiological and psychological factors. For related information see also: 05 Biotechnology.

05 Biotechnology

Includes life support systems, human engineering; protective clothing and equipment; crew training and evaluation, and piloting. For related information see also: 04 Biosciences

06 Chemistry

Includes chemical analysis and identification (e.g., spectroscopy). For applications see: 17 Materials, Metallic; 18 Materials, Nonmetallic; and 27 Propellants.

07 Communications

Includes communications equipment and techniques; noise; radio and communications blackout; modulation telemetry; tracking radar and optical observation; and wave propagation. For basic research see: 23 Physics, General; and 21 Navigation.

08 Computers

Includes computer operation and programming; and data processing. For applications, see specific categories. For related information see also: 19 Mathematics.

09 Electronic Equipment

Includes electronic test equipment and maintainability; component parts, e.g., electron tubes, tunnel diodes, transistors, integrated circuitry; microminiaturization. For basic research see: 10 Electronics. For related information see also: 07 Communications and 21 Navigation.

10 Electronics

Includes circuit theory; and feedback and control theory. For applications see: 09 Electronic Equipment. For related information see specific Physics categories.

11 Facilities, Research and Support

Includes airports; lunar and planetary bases including associated vehicles; ground support systems; related logistics; simulators; test facilities (e.g., rocket engine test stands, shock tubes, and wind tunnels); test ranges; and tracking stations.

12 Fluid Mechanics

Includes boundary-layer flow; compressible flow; gas dynamics; hydrodynamics; and turbulence. For related information see also: 01 Aerodynamics; and 33 Thermodynamics and Combustion.

13 Geophysics

Includes aeronomy; upper and lower atmosphere studies; oceanography; cartography; and geodesy. For related information see also: 20 Meteorology; 29 Space Radiation; and 30 Space Sciences.

14 Instrumentation and Photography

Includes design, installation, and testing of instrumentation systems; gyroscopes; measuring instruments and gages; recorders, transducers; aerial photography; and telescopes and cameras.

15 Machine Elements and Processes

Includes bearings, seals, pumps, and other mechanical equipment; lubrication, friction, and wear; manufacturing processes and quality control; reliability; drafting; and materials fabrication, handling, and inspection.

16 Masers

Includes applications of masers and lasers. For basic research see: 26 Physics, Solid-State.

17 Materials, Metallic

Includes cermets; corrosion; physical and mechanical properties of materials; metallurgy; and applications as structural materials. For basic research see: 06 Chemistry. For related information see also: 18 Materials, Nonmetallic; and 32 Structural Mechanics.

18 Materials, Nonmetallic

Includes corrosion; physical and mechanical properties of materials (e.g., plastics); and elastomers, hydraulic fluids, etc. For basic research see: 06 Chemistry. For related information see also: 17 Materials, Metallic; 27 Propellants; and 32 Structural Mechanics.

19 Mathematics

Includes calculation methods and theory; and numerical analysis. For applications see specific categories. For related information see also: 08 Computers.

20 Meteorology

Includes climatology; weather forecasting; and visibility studies. For related information see also: 13 Geophysics; and 30 Space Sciences.

21 Navigation

Includes guidance; autopilots; star and planet tracking; inertial platforms; and air traffic control. For related information see also: 07 Communications.

22 Nuclear Engineering

Includes nuclear reactors and nuclear heat sources used for propulsion and auxiliary power. For basic research see: 24 Physics, Atomic, Molecular, and Nuclear. For related information see also: 03 Auxiliary Systems; and 28 Propulsion Systems.

23 Physics, General

Includes acoustics, cryogenics, mechanics, and optics. For astrophysics see: 30 Space Sciences. For geophysics and related information see also: 13 Geophysics, 20 Meteorology, and 29 Space Radiation.

24 Physics, Atomic, Molecular, and Nuclear

Includes atomic, molecular and nuclear physics. For applications see: 22 Nuclear Engineering. For related information see also: 29 Space Radiation.

25 Physics, Plasma

Includes magnetohydrodynamics. For applications see: 28 Propulsion Systems.

26 Physics, Solid-State

Includes semiconductor theory; and superconductivity. For applications see: 16 Masers. For related information see also: 10 Electronics.

27 Propellants

Includes fuels; igniters; and oxidizers. For basic re-

search see: 06 Chemistry; and 33 Thermodynamics and Combustion. For related information see also: 28 Propulsion Systems.

28 Propulsion Systems

Includes air breathing, electric, liquid, solid, and magnetohydrodynamic propulsion. For nuclear propulsion see: 22 Nuclear Engineering. For basic research see: 23 Physics, General; and 33 Thermodynamics and Combustion. For applications see: 31 Space Vehicles. For related information see also: 27 Propellants.

29 Space Radiation

Includes cosmic radiation; solar flares; solar radiation; and Van Allen radiation belts. For related information see also: 13 Geophysics, and 24 Physics, Atomic, Molecular, and Nuclear.

30 Space Sciences

Includes astronomy and astrophysics; cosmology; lunar and planetary flight and exploration; and theoretical analysis of orbits and trajectories. For related information see also: 11 Facilities, Research and Support; and 31 Space Vehicles.

31 Space Vehicles

Includes launch vehicles; manned space capsules; clustered and multistage rockets; satellites; sounding rockets and probes; and operating problems. For basic research see: 30 Space Sciences. For related information see also: 28 Propulsion Systems; and 32 Structural Mechanics.

32 Structural Mechanics

Includes structural element design and weight analysis; fatigue; thermal stress; impact phenomena; vibration; flutter; inflatable structures; and structural tests. For related information see also: 17 Materials, Metallic; and 18 Materials, Nonmetallic.

33 Thermodynamics and Combustion

Includes ablation, cooling, heating, heat transfer, thermal balance, and other thermal effects; and combustion theory. For related information see also: 12 Fluid Mechanics; and 27 Propellants.

34 General

Includes information of a broad nature related to industrial applications and technology, and to basic research; defense aspects; information retrieval; management; law and related legal matters; and legislative hearings and documents.

TABLE OF CONTENTS

Section 1 • Abstracts

(Subject Categories 1975-)

AERONAUTICS

Includes aeronautics (general); aerodynamics; air transportation and safety; aircraft communications and navigation; aircraft design, testing and performance; aircraft instrumentation; aircraft propulsion and power; aircraft stability and control; and research and support facilities (air).

For related information see also *Astronautics*.

01 AERONAUTICS (GENERAL)

02 AERODYNAMICS

Includes aerodynamics of bodies, combinations, wings, rotors, and control surfaces; and internal flow in ducts and turbomachinery.

For related information see also *34 Fluid Mechanics and Heat Transfer*.

03 AIR TRANSPORTATION AND SAFETY

Includes passenger and cargo air transport operations; and aircraft accidents.

For related information see also *16 Space Transportation* and *85 Urban Technology and Transportation*.

04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes digital and voice communication with aircraft; air navigation systems (satellite and ground based); and air traffic control.

For related information see also *17 Spacecraft Communications, Command and Tracking* and *32 Communications*.

05 AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes aircraft simulation technology.

For related information see also *18 Spacecraft Design, Testing and Performance* and *39 Structural Mechanics*.

06 AIRCRAFT INSTRUMENTATION

Includes cockpit and cabin display devices; and flight instruments.

For related information see also *19 Spacecraft Instrumentation* and *35 Instrumentation and Photography*.

07 AIRCRAFT PROPULSION AND POWER

Includes prime propulsion systems and systems components, e.g., gas turbine engines and compressors; and on-board auxiliary power plants for aircraft.

For related information see also *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*.

08 AIRCRAFT STABILITY AND CONTROL

Includes aircraft handling qualities; piloting; flight controls; and autopilots.

09 RESEARCH AND SUPPORT FACILITIES (AIR)

Includes airports, hangars and runways; aircraft repair and overhaul facilities; wind tunnels; shock tube facilities; and engine test blocks.

For related information see also *14 Ground Support Systems and Facilities (Space)*.

ASTRONAUTICS

Includes astronautics (general); astrodynamics; ground support systems and facilities (space); launch vehicles and space vehicles; space transportation; spacecraft communications, command and tracking; spacecraft design, testing and performance; spacecraft instrumentation; and spacecraft propulsion and power.

For related information see also *Aeronautics*.

12 ASTRONAUTICS (GENERAL)

For extraterrestrial exploration see *91 Lunar and Planetary Exploration*.

13 ASTRODYNAMICS

Includes powered and free-flight trajectories; and orbit and launching dynamics.

14 GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

Includes launch complexes, research and production facilities; ground support equipment, e.g., mobile transporters; and simulators.

For related information see also *09 Research and Support Facilities (Air)*.

15 LAUNCH VEHICLES AND SPACE VEHICLES

Includes boosters; manned orbital laboratories; reusable vehicles; and space stations.

16 SPACE TRANSPORTATION

Includes passenger and cargo space transportation, e.g., shuttle operations; and rescue techniques.

For related information see also *03 Air Transportation and Safety* and *85 Urban Technology and Transportation*.

17 SPACECRAFT COMMUNICATIONS, COMMAND AND TRACKING

Includes telemetry; space communications networks; astronavigation; and radio blackout.

For related information see also *04 Aircraft Communications and Navigation* and *32 Communications*.

18 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes spacecraft thermal and environmental control; and attitude control.

For life support systems see *54 Man/System Technology and Life Support*. For related information see also *05 Aircraft Design, Testing and Performance* and *39 Structural Mechanics*.

19 SPACECRAFT INSTRUMENTATION

For related information see also *06 Aircraft Instrumentation* and *35 Instrumentation and Photography*.

20 SPACECRAFT PROPULSION AND POWER

Includes main propulsion systems and components, e.g., rocket engines; and spacecraft auxiliary power sources.

For related information see also *07 Aircraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*.

CHEMISTRY AND MATERIALS

Includes chemistry and materials (general); composite materials; inorganic and physical chemistry; metallic materials; nonmetallic materials; and propellants and fuels.

23 CHEMISTRY AND MATERIALS (GENERAL)

Includes biochemistry and organic chemistry.

24 COMPOSITE MATERIALS

Includes laminates.

25 INORGANIC AND PHYSICAL CHEMISTRY

Includes chemical analysis, e.g., chromatography; combustion theory; electrochemistry; and photochemistry.

For related information see also *77 Thermodynamics and Statistical Physics*.

26 METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals, e.g., corrosion; and metallurgy.

27 NONMETALLIC MATERIALS

Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials.

28 PROPELLANTS AND FUELS

Includes rocket propellants, igniters, and oxidizers; storage and handling; and aircraft fuels.

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, and *44 Energy Production and Conversion*.

ENGINEERING

Includes engineering (general); communications; electronics and electrical engineering; fluid mechanics and heat transfer; instrumentation and photography; lasers and masers; mechanical engineering; quality assurance and reliability; and structural mechanics.

For related information see also *Physics*.

31 ENGINEERING (GENERAL)

Includes vacuum technology; control engineering; display engineering; and cryogenics.

32 COMMUNICATIONS

Includes land and global communications; communications theory; and optical communications.

For related information see also *04 Aircraft Communications and Navigation* and *17 Spacecraft Communications, Command and Tracking*.

33 ELECTRONICS AND ELECTRICAL ENGINEERING

Includes test equipment and maintainability; components, e.g., tunnel diodes and transistors; microminiaturization; and integrated circuitry.

For related information see also *60 Computer Operations and Hardware* and *76 Solid-State Physics*.

34 FLUID MECHANICS AND HEAT TRANSFER

Includes boundary layers; hydrodynamics; fluidics; mass transfer; and ablation cooling.

For related information see also *02 Aerodynamics* and *77 Thermodynamics and Statistical Physics*.

35 INSTRUMENTATION AND PHOTOGRAPHY

Includes remote sensors; measuring instruments and gages; detectors; cameras and photographic supplies; and holography.

For aerial photography see *43 Earth Resources*. For related information see also *06 Aircraft Instrumentation* and *19 Spacecraft Instrumentation*.

36 LASERS AND MASERS

Includes parametric amplifiers.

37 MECHANICAL ENGINEERING

Includes auxiliary systems (non-power); machine elements and processes; and mechanical equipment.

38 QUALITY ASSURANCE AND RELIABILITY

Includes product sampling procedures and techniques; and quality control.

39 STRUCTURAL MECHANICS

Includes structural element design and weight analysis; fatigue; and thermal stress.

For applications see *05 Aircraft Design, Testing and Performance* and *18 Spacecraft Design, Testing and Performance*.

GEOSCIENCES

Includes geosciences (general); earth resources; energy production and conversion; environment pollution; geophysics; meteorology and climatology; and oceanography.

For related information see also *Space Sciences*.

42 GEOSCIENCES (GENERAL)

43 EARTH RESOURCES

Includes remote sensing of earth resources by aircraft and spacecraft; photogrammetry; and aerial photography.

For instrumentation see *35 Instrumentation and Photography*.

44 ENERGY PRODUCTION AND CONVERSION

Includes specific energy conversion systems, e.g., fuel cells and batteries; global sources of energy; fossil fuels; geophysical conversion; hydroelectric power; and wind power.

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *85 Urban Technology and Transportation*.

45 ENVIRONMENT POLLUTION

Includes air, noise, thermal and water pollution; environment monitoring; and contamination control.

46 GEOPHYSICS

Includes aeronomy; upper and lower atmosphere studies; ionospheric and magnetospheric physics; and geomagnetism.

For space radiation see *93 Space Radiation*.

47 METEOROLOGY AND CLIMATOLOGY

Includes weather forecasting and modification.

48 OCEANOGRAPHY

Includes biological, dynamic and physical oceanography; and marine resources.

LIFE SCIENCES

Includes life sciences (general); aerospace medicine; behavioral sciences; man/system technology and life support; and planetary biology.

51 LIFE SCIENCES (GENERAL)

Includes genetics.

52 AEROSPACE MEDICINE

Includes physiological factors; biological effects of radiation; and weightlessness.

53 BEHAVIORAL SCIENCES

Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

54 MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human engineering; biotechnology; and space suits and protective clothing.

55 PLANETARY BIOLOGY

Includes exobiology; and extraterrestrial life.

MATHEMATICAL AND COMPUTER SCIENCES

Includes mathematical and computer sciences (general); computer operations and hardware; computer programming and software; computer systems; cybernetics; numerical analysis; statistics and probability; systems analysis; and theoretical mathematics.

59 MATHEMATICAL AND COMPUTER SCIENCES (GENERAL)

60 COMPUTER OPERATIONS AND HARDWARE

Includes computer graphics and data processing.

For components see *33 Electronics and Electrical Engineering*.

61 COMPUTER PROGRAMMING AND SOFTWARE

Includes computer programs, routines, and algorithms.

62 COMPUTER SYSTEMS

Includes computer networks.

63 CYBERNETICS

Includes feedback and control theory.

For related information see also *54 Man/System Technology and Life Support*.

64 NUMERICAL ANALYSIS

Includes iteration, difference equations, and numerical approximation.

65 STATISTICS AND PROBABILITY

Includes data sampling and smoothing; Monte Carlo method; and stochastic processes.

66 SYSTEMS ANALYSIS

Includes mathematical modeling; network analysis; and operations research.

67 THEORETICAL MATHEMATICS

Includes topology and number theory.

PHYSICS

Includes physics (general); acoustics; atomic and molecular physics; nuclear and high-energy physics; optics; plasma physics; solid-state physics; and thermodynamics and statistical physics.

For related information see also *Engineering*.

70 PHYSICS (GENERAL)

For geophysics see *46 Geophysics*. For astrophysics see *90 Astrophysics*. For solar physics see *92 Solar Physics*.

71 ACOUSTICS

Includes sound generation, transmission, and attenuation.

For noise pollution see *45 Environment Pollution*.

72 ATOMIC AND MOLECULAR PHYSICS

Includes atomic structure and molecular spectra.

73 NUCLEAR AND HIGH-ENERGY PHYSICS

Includes elementary and nuclear particles; and reactor theory.

For space radiation see *93 Space Radiation*.

74 OPTICS

Includes light phenomena.

75 PLASMA PHYSICS

Includes magnetohydrodynamics and plasma fusion.

For ionospheric plasmas see *46 Geophysics*. For space plasmas see *90 Astrophysics*.

76 SOLID-STATE PHYSICS

Includes superconductivity.

For related information see also *33 Electronics and Electrical Engineering* and *36 Lasers and Masers*.

77 THERMODYNAMICS AND STATISTICAL PHYSICS

Includes quantum mechanics; and Bose and Fermi statistics.

For related information see also *25 Inorganic and Physical Chemistry* and *34 Fluid Mechanics and Heat Transfer*.

SOCIAL SCIENCES

Includes social sciences (general); administration and management; documentation and information science; economics and cost analysis; law and political science; and urban technology and transportation.

80 SOCIAL SCIENCES (GENERAL)

Includes educational matters.

81 ADMINISTRATION AND MANAGEMENT

Includes management planning and research.

82 DOCUMENTATION AND INFORMATION SCIENCE

Includes information storage and retrieval technology; micrography; and library science.

For computer documentation see *61 Computer Programming and Software*.

83 ECONOMICS AND COST ANALYSIS

Includes cost effectiveness studies.

84 LAW AND POLITICAL SCIENCE

Includes space law; international law; international cooperation; and patent policy.

85 URBAN TECHNOLOGY AND TRANSPORTATION

Includes applications of space technology to urban problems; technology transfer; technology assessment; and surface and mass transportation.

For related information see *03 Air Transportation and Safety*, *16 Space Transportation*, and *44 Energy Production and Conversion*.

SPACE SCIENCES

Includes space sciences (general); astronomy; astrophysics; lunar and planetary exploration; solar physics; and space radiation.

For related information see also *Geosciences*.

88 SPACE SCIENCES (GENERAL)

89 ASTRONOMY

Includes radio and gamma-ray astronomy; celestial mechanics; and astrometry.

90 ASTROPHYSICS

Includes cosmology; and interstellar and interplanetary gases and dust.

91 LUNAR AND PLANETARY EXPLORATION

Includes planetology; and manned and unmanned flights.

For spacecraft design see *18 Spacecraft Design, Testing and Performance*. For space stations see *15 Launch Vehicles and Space Vehicles*.

92 SOLAR PHYSICS

Includes solar activity, solar flares, solar radiation and sunspots.

93 SPACE RADIATION

Includes cosmic radiation; and inner and outer earth's radiation belts.

For biological effects of radiation see *52 Aerospace Medicine*. For theory see *73 Nuclear and High-Energy Physics*.

GENERAL

99 GENERAL

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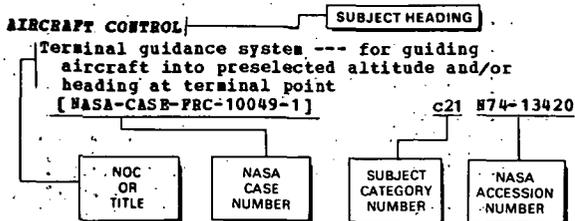
Subject Index

NASA PATENT ABSTRACTS BIBLIOGRAPHY

JULY 1976

Section 2

Typical Subject Index Listing



The subject heading is the key to the subject content of the document. A brief description of the document, e.g., title, title plus a title extension, or Notation of Content (NOC), is included for each subject entry to indicate the subject heading context; these descriptions are arranged under each subject heading in ascending accession number order. The NASA Case Number serves as the prime access number to the patent documents. The Subject Category Number indicates the category in Section 1 (Abstracts) in which the patent citation and abstract are located. The NASA accession number denotes the number by which the citation is identified within the subject category.

A

ABLATION

- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding [NASA-CASE-XMS-02677] c31 N70-42075
- Hypersonic test facility for studying ablation in models under high pressure and high temperature [NASA-CASE-XLA-00378] c11 N71-15925
- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure [NASA-CASE-XLA-05378] c11 N71-21475
- Ablation sensor for measuring char layer recession rate using electric wires [NASA-CASE-XLA-01794] c33 N71-21586
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres [NASA-CASE-XLA-01791] c14 N71-22991
- Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface [NASA-CASE-LEW-10359] c33 N72-25911

ABLATIVE MATERIALS

- Filling honeycomb matrix with deaerated paste filler [NASA-CASE-XMS-01108] c15 N69-24322
- Sensor device with switches for measuring surface recession of charring and noncharring ablators [NASA-CASE-XLA-01781] c14 N69-39975
- Vacuum method for molding thermosetting compounds used as ablative materials [NASA-CASE-XLA-01091] c15 N71-10672
- Ablative resins used for retarding regression in ablative material [NASA-CASE-XLE-05913] c33 N71-14032
- Design, development, and characteristics of ablation structures [NASA-CASE-XMS-01816] c33 N71-15623
- Method and apparatus for fabrication of heat insulating and ablative reentry structure [NASA-CASE-XMS-02009] c33 N71-20834
- Production and application of sprayable fiber reinforced ablation material [NASA-CASE-XLA-04251] c18 N71-26100
- Ablative heat shield for protection from aerodynamic heating of reentry spacecraft [NASA-CASE-MSC-12143-1] c33 N72-17947
- Ablative system with liquid carrying ablative material bodies and forming self-replacing

- ablative surface [NASA-CASE-LEW-10359] c33 N72-25911
- Carrier liquid system containing bodies of ablative material [NASA-CASE-LEW-10359-2] c33 N73-25952
- Ablation article and surface for analyzing flow transition on ablative surface [NASA-CASE-LAR-10439-1] c33 N73-27796
- Dual measurement ablation sensor [NASA-CASE-LAR-10105-1] c33 N74-15652
- ABORT APPARATUS**
- Coupling device for linear shaped charge for space vehicle abort system [NASA-CASE-XLA-00189] c33 N70-36846
- ABRASION RESISTANCE**
- Zinc dust formulation for abrasion resistant steel coatings [NASA-CASE-GSC-10361-1] c18 N72-23581
- Abrasion resistant coatings for plastic surfaces [NASA-CASE-ARC-10915-1] c27 N76-13292
- ABSORBENTS**
- Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions [NASA-CASE-XMS-01492] c05 N70-41297
- Fluid flow control valve for regulating fluids in molecular quantities [NASA-CASE-XLE-00703] c15 N71-15967
- Noncontaminating swab with absorbent end covered with netted envelope to prevent egress of absorbent material [NASA-CASE-MFS-18100] c15 N72-11390
- Protein sterilization of firefly luciferase without denaturation [NASA-CASE-GSC-10225-1] c06 N73-27086
- ABSORBERS (MATERIALS)**
- Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures [NASA-CASE-XMS-05303] c07 N69-27462
- Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator [NASA-CASE-LAR-10180-1] c06 N71-13461
- Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal [NASA-CASE-MFS-14711] c15 N71-26185
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature [NASA-CASE-XMP-04208] c33 N71-29051
- ABSORPTION**
- Cross linked polymer system for oil or fat absorption properties [NASA-CASE-NPO-11609-1] c06 N72-22114
- Method and apparatus for background signal reduction in opto-acoustic absorption measurement [NASA-CASE-NPO-13683-1] c35 N75-29383
- ABSORPTION CROSS SECTIONS**
- Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration [NASA-CASE-MSC-12280] c27 N71-16348
- ABSORPTIVITY**
- Scattering independent determination of absorption and emission coefficients and radiative equilibrium state [NASA-CASE-NPO-13677-1] c35 N75-16791
- Detector absorptivity measuring method and apparatus [NASA-CASE-LAR-10907-1] c35 N75-19629

SUBJECT

AC GENERATORS

AC GENERATORS

Alternating current signal generator providing plurality of amplitude modulated output signals [NASA-CASE-XNP-05612] c09 N69-21468

Improved alternator with windings of superconducting materials acting as permanent magnet [NASA-CASE-XLE-02824] c03 N69-39890

Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature [NASA-CASE-XLE-02823] c09 N71-23443

ACCELERATION

Single grid accelerator system for electron bombardment type ion thruster [NASA-CASE-XLE-10453-2] c28 N73-27699

ACCELERATION (PHYSICS)

Centrifuge mounted motion simulator with elevator mechanism [NASA-CASE-XAC-00399] c14 N70-34815

Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier [NASA-CASE-XMP-00424] c11 N70-38196

Development of method for producing artificial gravity in manned spacecraft [NASA-CASE-XNP-02595] c31 N71-21881

Vibration control of flexible bodies in steady accelerating environment [NASA-CASE-LAR-10106-1] c15 N71-27169

G-load measuring and indicator apparatus --- for aircraft [NASA-CASE-ARC-10806] c14 N74-27872

Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot [NASA-CASE-LAR-10550-1] c11 N74-30597

G-load measuring and indicator apparatus [NASA-CASE-ARC-10806-1] c35 N75-29381

ACCELERATION PROTECTION

Astronaut restraint suit for high acceleration protection [NASA-CASE-YAC-00405] c05 N70-41819

ACCELERATION STRESSES (PHYSIOLOGY)

Development of method for producing artificial gravity in manned spacecraft [NASA-CASE-XNP-02595] c31 N71-21881

ACCELERATION TOLERANCE

Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components [NASA-CASE-NPO-10556] c14 N71-27185

ACCELERATORS

Annular arc accelerator shock tube [NASA-CASE-NPO-13528-1] c09 N75-11997

Spring operated accelerator and constant force spring mechanism therefor [NASA-CASE-ARC-10898-1] c37 N76-11441

ACCELEROMETERS

Superconductive accelerometer employing variable force principle to determine acceleration of bodies [NASA-CASE-XMP-01099] c14 N71-15969

Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer [NASA-CASE-XGS-03532] c14 N71-17627

Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation [NASA-CASE-HQN-10780] c14 N71-30265

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses [NASA-CASE-ERC-10292] c14 N72-25410

Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position [NASA-CASE-NPO-13044-1] c14 N74-15094

Recording apparatus [NASA-CASE-LAR-11353-1] c14 N74-20020

Accelerometer telemetry system --- for monitoring motor responses [NASA-CASE-ARC-10849-1] c35 N75-20685

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The 3-5 photocathode with nitrogen doping for increased quantum efficiency --- using acceptor materials [NASA-CASE-NPO-12134-1] c33 N75-16745

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Direct radiation cooling of linear beam collector tubes [NASA-CASE-XNP-09227] c15 N69-24319

Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants [NASA-CASE-XLE-00685] c28 N70-41992

Small plasma probe using tungsten wire collector in tubular shield [NASA-CASE-XLE-02578] c25 N71-20747

Electrostatic charged particle collector containing stacked electrodes for microwave tube [NASA-CASE-LEW-11192-1] c09 N73-13208

An improved accumulator [NASA-CASE-MPS-19287-1] c34 N76-14418

ACETALS

Synthesis of schiff bases for heat shields by acetal amine reactions [NASA-CASE-XMP-08652] c06 N71-11243

ACETYLENE

Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds [NASA-CASE-XNP-03250] c06 N71-23500

ACOUSTIC ATTENUATION

Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity [NASA-CASE-LAR-11435-1] c35 N76-15432

ACOUSTIC DUCTS

Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts [NASA-CASE-LAR-11141-1] c02 N74-32418

ACOUSTIC IMPEDANCE

Method and transducer device for detecting presence of hydrogen gas [NASA-CASE-XMP-03873] c06 N69-39733

ACOUSTIC MEASUREMENTS

Instrumentation for measuring aircraft noise and sonic boom [NASA-CASE-LAR-11476-1] c35 N75-27334

ACOUSTIC PROPAGATION

Material suspension within an acoustically excited resonant chamber --- at near weightless conditions [NASA-CASE-NPO-13263-1] c12 N75-24774

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Acoustical transducer calibrating system including differential pressure actuating device [NASA-CASE-FRC-10060-1] c14 N73-27379

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Acoustic energy shaping [NASA-CASE-NPO-13802-1] c71 N76-18886

ACOUSTO-OPTICS

Acoustic vibration test apparatus for wiring harnesses [NASA-CASE-MSC-15158-1] c14 N72-17325

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Ablative resins used for retarding regression in ablative material [NASA-CASE-XLE-05913] c33 N71-14032

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Heat activated emf cells with aluminum anode [NASA-CASE-LEW-11359] c03 N71-28579

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Patent data on gas actuated bolt disconnect assembly [NASA-CASE-XLA-00326] c03 N70-34667

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- [NASA-CASE-XGS-00824] c15 N71-16078
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in short duration wind tunnels
[NASA-CASE-MFS-12915] c11 N71-17600
- Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255
- Mechanical actuator wherein linear motion
changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045
- Hydraulic actuator design for space deployment
of heat radiators
[NASA-CASE-HSC-11817-1] c15 N71-26611
- Electromechanical control actuator system using
double differential screws
[NASA-CASE-ERC-10022] c15 N71-26635
- System to control speed of hydraulically movable
members by limiting energy applied to
actuators with hydraulic servo loop
[NASA-CASE-ARC-10131-1] c15 N71-27754
- Zero power telemetry actuated switch for
biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
- Mechanically operated hand which can depress
trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463
- Hermetically sealed elbow actuator for use in
severe environments
[NASA-CASE-MFS-14710] c09 N72-22195
- Characteristics of lightweight actuator for
imparting linear motion using elongated output
shaft
[NASA-CASE-NPO-11222] c15 N72-25456
- Rotary actuator for use in environments with no
rolling and sliding friction
[NASA-CASE-NPO-10244] c15 N72-26371
- Gas-operated actuator with cyclic motion of
expansion chamber
[NASA-CASE-NPO-11340] c15 N72-33477
- Redundant hydraulic control system for actuators
with three main valve combination
[NASA-CASE-MFS-20944] c15 N73-13466
- Actuator operated by electrolytic drive gas
generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
- Manual actuator --- for spacecraft exercising
machines
[NASA-CASE-MFS-21481-1] c15 N74-18127
- Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c15 N74-21060
- Miniature hydraulic actuator --- for control
surfaces on airfoils
[NASA-CASE-LAR-11522-1] c15 N74-34881
- Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N75-29430
- Actuator device for artificial leg
[NASA-CASE-MFS-23225-1] c54 N75-32767
- ADAPTERS**
Camera adapter design for image magnification
including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
- ADAPTIVE CONTROL**
Self testing and repairing computer comprising
control and diagnostic unit and rollback
points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
- Synchronous dc direct-drive system comprising
multiple-loop hybrid control system
controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
- Versatile ergometer with work load control
[NASA-CASE-MFS-21109-1] c05 N73-27941
- Adaptive voting computer system
[NASA-CASE-HSC-13932-1] c08 N74-14920
- ADAPTIVE FILTERS**
Adaptive notch filter, using modulation
techniques for reversed phase noise signal
[NASA-CASE-XMF-01892] c10 N71-22986
- ADDING CIRCUITS**
Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
- Error correction circuitry for binary signal
channels
[NASA-CASE-INP-03263] c09 N71-18843
- ADDITIVES**
Ammonium perchlorate composite propellant with
organic Cu/II/ chelate catalytic additive
- [NASA-CASE-LAR-10173-1] c27 N71-14090
Tantalum modified ferritic iron base alloys ---
for use in high temperature environments
[NASA-CASE-LEW-12095-1] c26 N76-17233
- ADENOSINE TRIPHOSPHATE**
Use of enzyme hexokinase and glucose to reduce
inherent light levels of ATP in luciferase
compositions
[NASA-CASE-XGS-05533] c04 N69-27487
- Detection instrument for light emitted from ATP
biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Describing method for lyophilization of
luciferase containing mixtures for use in life
detection reactions
[NASA-CASE-XGS-05532] c06 N71-17705
- Automatic device for assaying urine on bacterial
adenosine triphosphate content
[NASA-CASE-GSC-11169-2] c05 N73-32011
- Application of luciferase assay for ATP to
antimicrobial drug susceptibility testing
[NASA-CASE-GSC-12039-1] c51 N75-26629
- ADHESION**
Tool for mounting and removing studs with
adhesive coated head portion
[NASA-CASE-MFS-20299] c15 N72-11392
- ADHESION TESTS**
Apparatus for determining quality of bond
between high density material and low density
material
[NASA-CASE-MFS-13686] c15 N71-18132
- ADHESIVE BONDING**
Fabrication of solar cell banks for attaching
solar cells to base members or substrates
[NASA-CASE-XNP-00826] c03 N71-20895
- Method for honeycomb panel bonding by
thermosetting film adhesive with electrical
heat means
[NASA-CASE-XMF-01402] c18 N71-21651
- Etching aluminum alloys with aqueous solution
containing sulfuric acid, hydrofluoric acid,
and an alkali metal dischromate for adhesive
bonding
[NASA-CASE-XMF-02303] c17 N71-23828
- Adhesive spray process for attaching biomedical
skin electrodes
[NASA-CASE-XFR-07658-1] c05 N71-26293
- Bonding of sapphire to sapphire by eutectic
mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
- Thermal insulation attaching means
[NASA-CASE-HSC-12619-1] c39 N75-21671
- ADHESIVES**
Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263
- ADJUSTING**
Centering device with ultrafine adjustment for
use with roundness measuring apparatus
[NASA-CASE-XMF-00480] c14 N70-39898
- Slotted fine-adjustment support for optical
devices
[NASA-CASE-MFS-20249] c15 N72-11386
- Adjustable support device with jacket screw for
altering distance between base and supported
member
[NASA-CASE-NPO-10721] c15 N72-27484
- Clock setter
[NASA-CASE-LAR-11458-1] c35 N76-16392
- AERODYNAMIC BRAKES**
Bluff-shaped annular configuration for
supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
- Lightweight, variable solidity knitted parachute
fabric --- for aerodynamic decelerators
[NASA-CASE-LAR-10776-1] c02 N74-10034
- AERODYNAMIC CHARACTERISTICS**
Variable aspect ratio and variable sweep delta
wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
- Designing spacecraft for flight into space,
atmospheric reentry, and landing at selected
sites
[NASA-CASE-XAC-02058] c02 N71-16087
- Spacecraft configurations and aerodynamic
characteristics of space shuttle systems with
two reusable stages
[NASA-CASE-HSC-12433] c31 N73-14854
- Characteristics of system for providing yaw
control of vehicles at high supersonic and

- hypersonic speeds by deflecting flaps mounted on upper wing surface
[NASA-CASE-LAR-11140-1] c02 N73-20008
- AERODYNAMIC CONFIGURATIONS**
Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
Manned space capsule configuration for orbital flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938
Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631
Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMF-02263] c02 N74-10907
Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c28 N74-28226
- AERODYNAMIC HEATING**
Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles
[NASA-CASE-XLA-00892] c33 N71-17897
Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
Ablative heat shield for protection from aerodynamic heating of reentry spacecraft
[NASA-CASE-MSC-12143-1] c33 N72-17947
- AERODYNAMIC LOADS**
Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856
- AERODYNAMIC NOISE**
Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N75-32134
- AERODYNAMIC STABILITY**
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMF-04163] c02 N71-23007
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
- AERONAUTICAL ENGINEERING**
Differential pressure cell insensitive to changes in ambient temperature and extreme overload
[NASA-CASE-XAC-00042] c14 N70-34816
- AEROSOLS**
Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-MFS-20829] c12 N72-21310
- AEROSPACE ENGINEERING**
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[NASA-CASE-NPO-10109] c03 N71-11049
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214
- AEROSPACE ENVIRONMENTS**
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[NASA-CASE-XLE-01902] c28 N71-10574
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XMF-03988] c15 N71-21403
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[NASA-CASE-XMS-04201] c14 N71-22990
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-XNP-05524] c33 N71-24876
Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964
High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
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[NASA-CASE-MSC-14640-1] c54 N76-14804
- AEROSPACE MEDICINE**
Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329
- AEROSPACE VEHICLES**
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[NASA-CASE-XLA-00142] c02 N70-33286
Landing pad assembly for aerospace vehicles
[NASA-CASE-XMF-02853] c31 N70-36654
Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAB-10539-1] c17 N73-12547
- AEROSPACEPLANES**
Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMF-02263] c02 N74-10907
- AFTERBODIES**
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[NASA-CASE-XLA-10450] c28 N71-21493
- AFTERBURNING**
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[NASA-CASE-XLA-00154] c28 N70-33374
- AGING (MATERIALS)**
Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
- AILERONS**
Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
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Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by

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- diffusion through glove
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for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- AIR CONDITIONING EQUIPMENT**
- Portable apparatus producing high velocity
annular air column surrounding low velocity,
filtered, superclean air central core for
industrial clean room environmental control
[NASA-CASE-IMP-03212] c15 N71-22721
- Air conditioning system and component therefore
distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c15 N74-27902
- AIR COOLING**
- Modification and improvement of turbine blades
for maximum cooling efficiency
[NASA-CASE-XLB-00092] c15 N70-33264
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- Development of filter apparatus for gas
separation and characteristics of filter cell
support frame for improved operation
[NASA-CASE-MS-C-12297] c14 N72-23457
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- Wind tunnel air flow modulating device and
apparatus for selectively generating wave
motion in wind tunnel airstream
[NASA-CASE-XLA-00112] c11 N70-33287
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tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
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turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
- Apparatus and method for generating large mass
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[NASA-CASE-LAR-10612-1] c12 N73-28144
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distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c15 N74-27902
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[NASA-CASE-ARC-10905-1] c31 N75-33278
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and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
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- Aeroflexible wing structure with air scoop for
inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981
- Reversed cowl flap inlet thrust augmentor ---
with adjustable airfoil
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- AIR LOCKS**
- Spacecraft air lock system to provide ingress
and egress of astronaut without subjecting
vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- System for removing and repairing spacecraft
control thrusters by use of portable air locks
[NASA-CASE-MFS-20325] c28 N71-27095
- Airlock for waste transferal from pressurized
enclosure aboard space vehicle to waste
receiver at negative pressure
[NASA-CASE-MFS-20922] c31 N72-20840
- Airlock
[NASA-CASE-MFS-20922-1] c15 N74-22136
- Apparatus for inserting and removing specimens
from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c15 N74-27900
- AIR POLLUTION**
- Analytical photoionization mass spectrometer
with argon gas filter between light source and
monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Contamination free separation nut eliminating
combustion products from ambient surroundings
generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- Monitoring atmospheric pollutants with a
heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284
- Method for detecting pollutants --- ozone,
nitrogen dioxide, carbon dioxide
[NASA-CASE-LAR-11405-1] c35 N75-15938
- Fluorescence detector for monitoring atmospheric
pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
- Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- Indicator providing continuous indication of the
presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742
- AIR PURIFICATION**
- Developing high pressure gas purification and
filtration system for use in test operations
of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
- Portable apparatus producing high velocity
annular air column surrounding low velocity,
filtered, superclean air central core for
industrial clean room environmental control
[NASA-CASE-IMP-03212] c15 N71-22721
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- Pressure probe for sensing ambient static air
pressures
[NASA-CASE-XLA-00481] c14 N70-36824
- Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401
- AIR TRAFFIC CONTROL**
- Traffic control system for supersonic transports
using synchronous satellite for data relay
between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- Satellite aided aircraft collision avoidance
system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- System and method for position locating for air
traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
- AIRBORNE EQUIPMENT**
- Inflatable radar reflector unit - lightweight,
highly reflective to electromagnetic
radiation, and adaptable for erection and
deployment with minimum effort and time
[NASA-CASE-XNS-00893] c07 N70-40063
- Charge-coupled device data processor for an
airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N75-26206
- AIRBORNE/SPACEBORNE COMPUTERS**
- Logic circuit to ripple add and subtract binary
counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
- Shared memory for a fault-tolerant computer,
[NASA-CASE-NPO-13139-1] c60 N76-21914
- AIRCRAFT**
- Pilot warning indicator system of intruder
aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
- AIRCRAFT ACCIDENTS**
- Satellite aided aircraft collision avoidance
system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- AIRCRAFT APPROACH SPACING**
- Economical satellite aided vehicle avoidance
system for preventing midair collisions
[NASA-CASE-ERC-10419] c21 N72-21631
- AIRCRAFT CONFIGURATIONS**
- Variable sweep wing configuration for supersonic
aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
- Television simulation for aircraft and space
flight
[NASA-CASE-YPR-03107] c09 N71-19449
- Design of dual fuselage aircraft with pivoting
wing and horizontal stabilizer to permit
yawing of wing in flight for high speed
operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
- Development of aircraft configuration for
reduction of jet aircraft noise by exhausting
engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
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- Development and characteristics of control
system for flexible wings
[NASA-CASE-XLA-06958] c02 N71-11038
- Development of attitude control system for
vertical takeoff aircraft using reaction
nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
- Device for controlling rotary potentiometer
mounted on aircraft steering wheel or aileron
control

- [NASA-CASE-XAC-10019] c15 N71-23809
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
- [NASA-CASE-LAR-10249-1] c02 N71-26110
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
- [NASA-CASE-XLA-08967] c02 N71-27088
Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
- [NASA-CASE-XAC-00048] c02 N71-29128
Development of thrust control system for application to control of aircraft and spacecraft
- [NASA-CASE-HSC-13397-1] c21 N72-25595
Aircraft control system for rotary wing aircraft
- [NASA-CASE-ERC-10439] c02 N73-19004
Situational display system of cathode ray tubes to assist pilot in aircraft control
- [NASA-CASE-ERC-10350] c14 N73-20474
Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
- [NASA-CASE-LAR-10682-1] c02 N73-26004
Integrated lift/drag controller for aircraft
- [NASA-CASE-ARC-10456-1] c05 N75-12930
High lift aircraft --- with improved stability, control, performance, and noise characteristics
- [NASA-CASE-LAR-11252-1] c05 N75-25914
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- Design of supersonic aircraft with novel fixed, swept wing planform
- [NASA-CASE-XLA-04451] c02 N71-12243
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- [NASA-CASE-ARC-10470-1] c02 N73-26005
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- [NASA-CASE-XMP-02263] c02 N74-10907
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- [NASA-CASE-LAR-11252-1] c05 N75-25914
Transonic and supersonic aircraft wherein the problems of roll control at high angles of attack are minimized
- [NASA-CASE-LAR-11868-1] c08 N76-19159
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- [NASA-CASE-ERC-10081] c14 N72-28437
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- [NASA-CASE-LAR-11645-1] c02 N74-26456
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- [NASA-CASE-PRC-10049-1] c21 N74-13420
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- [NASA-CASE-XLE-00388] c28 N70-34788
- AIRCRAFT HYDRAULIC SYSTEMS**
- Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
- [NASA-CASE-LEV-11187-1] c28 N73-19793
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- [NASA-CASE-XLA-00100] c14 N70-36807
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- [NASA-CASE-XLA-00481] c14 N70-36824
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- [NASA-CASE-XLA-00487] c14 N70-40157
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- [NASA-CASE-XNP-03853] c23 N71-21882
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- [NASA-CASE-ERC-10392] c21 N73-14692
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- [NASA-CASE-ARC-10806-1] c35 N75-29381
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- [NASA-CASE-LAR-11387-1] c04 N76-20114
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- [NASA-CASE-XLA-00806] c02 N70-34858
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- [NASA-CASE-ARC-10179-1] c21 N72-22619
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- [NASA-CASE-XLA-00939] c11 N71-15926
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[NASA-CASE-NPO-11806-1] c03 N74-19693
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[NASA-CASE-GSC-10553-1] c07 N71-19854
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[NASA-CASE-XMS-09610] c07 N71-24625
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[NASA-CASE-MSC-12205-1] c07 N71-27056
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[NASA-CASE-GSC-10220-1] c07 N71-27233
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[NASA-CASE-XGS-02290] c07 N71-28809
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[NASA-CASE-XNP-01735] c07 N71-22750
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[NASA-CASE-XMS-04312] c07 N71-22984
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High impact antennas with high radiating efficiency
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[NASA-CASE-MFS-20068] c07 N71-27191
- Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
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- Application of luciferase assay for ATP to antimicrobial drug susceptibility testing
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[NASA-CASE-KSC-10752-1] c15 N73-27407
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
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[NASA-CASE-LEW-11026-1] c15 N73-33383
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- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
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- Apparatus for on-film optical recording of camera lens aperture and focus setting
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- Electron microscope aperture system
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- Intra- and extravehicular life support space suite for Apollo astronauts
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- Fuel system for thermal nuclear reactor which uses inorganic ion exchanger
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[NASA-CASE-XMP-02039] c15 N71-15871
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[NASA-CASE-MFS-13046] c07 N71-19433
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[NASA-CASE-XMP-08522] c15 N71-19486
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[NASA-CASE-XMP-07069] c15 N71-23815
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
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[NASA-CASE-LAR-10626-1] c14 N74-21015
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[NASA-CASE-KSC-10730-1] c14 N73-32318
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- Radiometric measuring system for solar activity

- and atmospheric attenuation and emission
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including turbine pump, cooling chamber, and
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[NASA-CASE-NPO-10467] c23 N71-26654
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Doppler frequency shift correction device for
multiplex communication with Applications
Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
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Silicon carbide backward diode with coated lead
attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
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Rotary vane attenuator with two stators and
intermediary rotor, using resistive and
orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420
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Analog spatial maneuver computer with three
output angles for obtaining desired spatial
attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
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narrow field of view sensor rotating about
spacecraft X-Y axis
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[NASA-CASE-NPO-13687-1] c35 N76-14433
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Visual target luminaires for retrofire attitude
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[NASA-CASE-XMS-12158-1] c31 N69-27499
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vehicles within or outside atmosphere
[NASA-CASE-XPR-00181] c21 N70-33279
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orientation of space vehicle or satellite by
using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
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liquid propellant rocket vehicles
[NASA-CASE-XMP-00185] c21 N70-34539
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and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
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[NASA-CASE-XNP-00294] c21 N70-36938
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final stage space vehicles, using horizon
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[NASA-CASE-XLA-00281] c21 N70-36943
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and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996
Three-axis controller operated by hand-wrist
motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
Attitude control training device for astronauts
permitting friction-free movement with five
degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
Photomultiplier detector of Canopus for
spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
Automatic balancing device for use on
frictionless supported attitude-controlled
test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
Development of spacecraft experiment pointing
and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
Development of attitude control system for
spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159
- System for aerodynamic control of rocket
vehicles by secondary injection of fluid into
nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Drive mechanism for operating reactance attitude
control system for aerospace bodies
[NASA-CASE-XMP-01598] c21 N71-15583
Attitude detection system using stellar
references for three-axis control and spin
stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
Remote control device operated by movement of
finger tips for manual control of spacecraft
attitude
[NASA-CASE-XAC-02405] c09 N71-16089
Thrust and attitude control apparatus using jet
nozzle in movable canard surface or fin
configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Attitude sensor with scanning mirrors for
detecting orientation of space vehicle with
respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
Development of attitude control system for
sounding rocket stabilization during ballistic
phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
Development of voice operated controller for
controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160
Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
Temperature compensated digital inertial sensor
--- circuit for maintaining inertial element
of gyroscope or accelerometer at constant
position
[NASA-CASE-NPO-13044-1] c14 N74-15094
Sun direction detection system --- for use in
controlling the attitude of a vehicle
[NASA-CASE-NPO-13722-1] c19 N75-33169
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Spacecraft attitude control system using solar
and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
An attitude control system
[NASA-CASE-MFS-22787-1] c21 N74-35096
- ATTITUDE INDICATORS**
Photosensitive light source device for detecting
unmanned spacecraft deviation from reference
attitude
[NASA-CASE-XNP-00438] c21 N70-35089
Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692
Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
- ATTITUDE STABILITY**
Dynamic precession damping of spin-stabilized
vehicles by using rate gyroscope and angular
accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
Attitude stabilizer for nonguided missile or
vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
Strapped down gyroscope aligned with sun and
star tracker optical axis calibrating roll,
yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784
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Audio equipment for removing impulse noise from
audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
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High efficiency transformerless amplitude
modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
Audio frequency analysis circuit for
determining, displaying, and recording
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[NASA-CASE-NPO-11147] c14 N72-27408

AUDITORY PERCEPTION

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AUDITORY PERCEPTION

Auditory display for the blind
[NASA-CASE-HQN-10832-1] c14 N74-21014

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Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons

BIOELECTRIC POTENTIAL

SUBJECT INDEX

- [NASA-CASE-XGS-01231] c14 N70-41676
 Bioassay of flavin coenzymes
 [NASA-CASE-GSC-10565-1] c06 N72-25149
 Enzymatic luminescent bioassay method for
 determining bacterial levels in urine
 [NASA-CASE-GSC-11092-2] c04 N73-27052
 Amino acid analysis
 [NASA-CASE-NPO-12130-1] c25 N75-14844
 Improved method of detecting and counting bacteria
 [NASA-CASE-GSC-11917-2] c51 N75-21921
 Servo-controlled intravitral microscope system
 [NASA-CASE-NPO-13214-1] c35 N75-25123
- BIOELECTRIC POTENTIAL**
 Electrochemically reversible silver-silver
 chloride electrode for detecting bioelectric
 potential differences generated by human
 muscles and organs
 [NASA-CASE-XMS-02872] c05 N69-21925
 Manufacturing process for making perspiration
 resistant-stress resistant biopotential
 electrode
 [NASA-CASE-HSC-90153-2] c05 N72-25120
- BIOELECTRICITY**
 Development and characteristics of electrodes in
 which poisoning by organic molecules is
 prevented by ion selective electrolytic
 deposition of hydrophilic protein colloid
 [NASA-CASE-XMS-04213-1] c09 N71-26002
- BIOENGINEERING**
 Bio-isolated dc operational amplifier --- for
 bioelectric measurements
 [NASA-CASE-ARC-10596-1] c09 N74-21851
- BIOPROSTHEMATICS**
 Temperature compensated solid state differential
 amplifier with application in
 bioinstrumentation circuits
 [NASA-CASE-XAC-00435] c09 N70-35440
 Electrode attached to helmets for detecting low
 level signals from skin of living creatures
 [NASA-CASE-ARC-10043-1] c05 N71-11193
 Characteristics of pressed disc electrode for
 biological measurements
 [NASA-CASE-XMS-04212-1] c05 N71-12346
 Development of apparatus and method for
 quantitatively measuring brain activity as
 automatic indication of sleep state and level
 of consciousness
 [NASA-CASE-HSC-13282-1] c05 N71-24729
 Development and characteristics of electrodes in
 which poisoning by organic molecules is
 prevented by ion selective electrolytic
 deposition of hydrophilic protein colloid
 [NASA-CASE-XMS-04213-1] c09 N71-26002
 Ultrasonic biomedical measuring and recording
 apparatus --- for recording motion of internal
 organs such as heart valves
 [NASA-CASE-ARC-10597-1] c05 N74-20726
 Subminiature insertable force transducer ---
 including a strain gage to measure forces in
 muscles
 [NASA-CASE-NPO-13423-1] c33 N75-31329
 Thermistor holder for skin temperature
 measurements
 [NASA-CASE-ARC-10855-1] c52 N75-33642
 Percutaneous connector device --- for
 transporting external electrical signals to
 internal body parts
 [NASA-CASE-KSC-10849-1] c54 N76-19816
- BIOLUMINESCENCE**
 Detection instrument for light emitted from ATP
 biochemical reaction
 [NASA-CASE-XGS-05534] c23 N71-16355
 Describing method for lyophilization of
 luciferase containing mixtures for use in life
 detection reactions
 [NASA-CASE-XGS-05532] c06 N71-17705
 Application of luciferase assay for ATP to
 antimicrobial drug susceptibility testing
 [NASA-CASE-GSC-12039-1] c51 N75-26629
- BIOLOGICAL DATA**
 Silicon radiation detecting probe design for in
 vivo biomedical use
 [NASA-CASE-XMS-01177] c05 N71-19440
- BIOMETRICS**
 Characteristics of pressed disc electrode for
 biological measurements
 [NASA-CASE-XMS-04212-1] c05 N71-12346
 Compressible electrolyte saturated sponge
 electrode for biomedical applications
- [NASA-CASE-HSC-13648] c05 N72-27103
 Ultrasonic biomedical measuring and recording
 apparatus --- for recording motion of internal
 organs such as heart valves
 [NASA-CASE-ARC-10597-1] c05 N74-20726
 Arterial pulse wave pressure transducer
 [NASA-CASE-GSC-11531-1] c05 N74-27566
- BIOTELEMETRY**
 Biotelemetry apparatus with dual voltage
 generators for implanting in animals
 [NASA-CASE-YAC-05706] c05 N71-12342
 Miniature multichannel biotelemetry system
 [NASA-CASE-NPO-13065-1] c05 N74-26625
 Medical subject monitoring systems ---
 multichannel monitoring systems
 [NASA-CASE-HSC-14180-1] c52 N76-14757
- BIREFRINGENCE**
 Automatic polarimeter capable of measuring
 transient birefringence changes in
 electro-optic materials
 [NASA-CASE-XNP-08883] c23 N71-16101
- BISMUTH COMPOUNDS**
 Hall effect magnetometer
 [NASA-CASE-LEW-11632-2] c35 N75-13213
- BISTABLE CIRCUITS**
 Bistable multivibrator circuits operating at
 high speed and low power dissipation
 [NASA-CASE-XGS-00823] c10 N71-15910
- BIT SYNCHRONIZATION**
 Telemetry data unit to form multibit words for
 use between demodulator and computer
 [NASA-CASE-XNP-09225] c09 N69-24333
 Bit synchronization system using digital data
 transition tracking phased locked loop
 [NASA-CASE-NPO-10844] c07 N72-20140
 Bit synchronization of PCM communications
 signal, without separate synchronization
 channel by digital correlation
 [NASA-CASE-NPO-11302-1] c07 N73-13149
 Method and apparatus for a single channel
 digital communications system ---
 synchronization of received PCM signal by
 digital correlation with reference signal
 [NASA-CASE-NPO-11302-2] c07 N74-10132
- BITERNARY CODE**
 Encoders designed to generate comma free
 biorthogonal Reed-Muller type code comprising
 conversion of 64 6-bit words into 64 32-bit
 data for communication purposes
 [NASA-CASE-NPO-10595] c10 N71-25917
- BITS**
 Logic circuit for generating multibit binary
 code word in parallel
 [NASA-CASE-XNP-04623] c10 N71-26103
 MOD 2 sequential function generator for multibit
 sequence, with two-bit shift register for each
 pair of bits
 [NASA-CASE-NPO-10636] c08 N72-25210
- BLACK BODY RADIATION**
 Development of black-body source calibration
 furnace
 [NASA-CASE-XLE-01399] c33 N71-15625
 Black body cavity radiometer with thermal
 resistance wire bridge circuit
 [NASA-CASE-XNP-08961] c14 N71-24809
 Black body radiometer design with temperature
 sensing and cavity heat source cone winding
 [NASA-CASE-XNP-09701] c14 N71-26475
 Black body radiometer having isothermally
 surrounded cavity for ultraviolet, visible,
 and infrared radiation
 [NASA-CASE-NPO-10810] c14 N71-27323
- BLADE TIPS**
 Modification and improvement of turbine blades
 for maximum cooling efficiency
 [NASA-CASE-XLE-00092] c15 N70-33264
- BLADES (CUTTERS)**
 Piston in bore cutter for severing parachute
 control lines and sealing cable hole to
 prevent water leakage into load
 [NASA-CASE-XMS-04072] c15 N70-42017
- BLAST LOADS**
 Development of apparatus for detonating
 explosive devices in order to determine forces
 generated and detonation propagation rate
 [NASA-CASE-LAR-10800-1] c33 N72-27959
- BLOOD**
 Reduction of blood serum cholesterol
 [NASA-CASE-NPO-12119-1] c52 N75-15270

BLOOD PRESSURE

Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317

Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c05 N74-26626

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c05 N74-27566

Circuit for detecting initial systole and diastolic notch --- for monitoring arterial pressure
[NASA-CASE-LEW-11581-1] c54 N75-13531

BLUFF BODIES

Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLC-00222] c02 N70-37939

BLUNT BODIES

Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436

BODIES OF REVOLUTION

Conforming polisher for aspheric surfaces of revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705

Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992

BODY FLUIDS

Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c05 N74-22771

Improved method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N75-21921

BODY KINEMATICS

Space suit with improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092

BODY MEASUREMENT (BIOLOGY)

Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals
[NASA-CASE-ARC-10583-1] c05 N73-14093

Ultra-flexible biomedical electrodes and wires
[NASA-CASE-ARC-10268-2] c05 N74-11900

Ultra-flexible biomedical electrode and wires
[NASA-CASE-ARC-10268-3] c05 N74-11901

BODY TEMPERATURE

Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-XMS-10269] c05 N71-24147

BODY VOLUME (BIOLOGY)

Whole body measurement systems --- for weightlessness simulation
[NASA-CASE-MSC-13972-1] c05 N74-10975

BOILERS

Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104

Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915

BOLOMETERS

High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057

Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NPO-10607] c09 N71-27232

BOLTS

Patent data on gas actuated bolt disconnect assembly
[NASA-CASE-XLA-00326] c03 N70-34667

Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601

Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-XMP-04966] c14 N71-17658

Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489

Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457

BONDING

Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735

Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c15 N74-23064

Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260

Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N76-19234

BONES

Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] c35 N75-12271

Method and system for in vivo measurement of bone tissue
[NASA-CASE-MSC-14276-1] c54 N75-21948

BOOMS (EQUIPMENT)

Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367

Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191

Extendable, self-deploying boom apparatus
[NASA-CASE-GSC-10566-1] c15 N72-18477

Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021

BOOSTER RECOVERY

Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176

Recoverable, reusable single stage booster capable of injecting large payloads into circular earth orbit
[NASA-CASE-XMP-01973] c31 N70-41588

BOOSTER ROCKET ENGINES

Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-XMP-00640] c15 N70-39924

Recoverable, reusable single stage booster capable of injecting large payloads into circular earth orbit
[NASA-CASE-XMP-01973] c31 N70-41588

BORING MACHINES

Automatic controlled drive mechanism for portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518

BORON

Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
[NASA-CASE-GSC-11425-1] c24 N74-20329

BORON CARBIDES

Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-XHQ-03903] c15 N69-21922

BOUNDARY LAYER CONTROL

Double hinged flap for boundary layer control over trailing edges of wings
[NASA-CASE-XLA-01290] c02 N70-42016

BOUNDARY LAYER SEPARATION

Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MFS-20831] c28 N71-29153

Controlled separation combustor --- airflow distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190

BOUNDARY LAYERS

Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
[NASA-CASE-XFR-02007] c12 N71-24692

Development of thermocouple instrument for measuring temperature of wall heated by flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 N72-27410

BOXES (CONTAINERS)

Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-MFS-20075] c09 N71-26133

BRAKES (FOR ARRESTING MOTION)

Energy dissipating shock absorbing system for land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850

- Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-YKS-07814] c15 N71-27067
- Sprag solenoid brake --- development and operations of electrically controlled brake
[NASA-CASE-MPS-21846-1] c15 N74-26976
- Motion restraining device --- for dissipating at a controlled rate the force of a moving body
[NASA-CASE-NPO-13619-1] c37 N75-22748
- Reel safety brake
[NASA-CASE-GSC-11960-1] c37 N76-13495
- BRAKING**
- Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XMP-01096] c10 N71-16030
- Linear magnetic braking system with nonuniformly wrapped primary coil producing constant braking force on secondary coil
[NASA-CASE-XLE-05079] c15 N71-17652
- Anemometer with braking mechanism to prevent rotation of wind driven elements
[NASA-CASE-XMP-05224] c14 N71-23726
- BRAZING**
- Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
- Application techniques for protecting materials during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311
- Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MPS-07369] c15 N71-20443
- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Electric resistance spot welding and brazing for producing metal bonds with superior mechanical and structural characteristics
[NASA-CASE-LAR-11072-1] c15 N73-20535
- Brazing alloy binder
[NASA-CASE-XMP-05868] c26 N75-27125
- Brazing alloy composition
[NASA-CASE-XMP-06053] c26 N75-27126
- Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127
- Method of fluxless brazing and diffusion bonding of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
- BREATHING APPARATUS**
- Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N75-13534
- BRICKS**
- Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- BRIGHTNESS**
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- BRIGHTNESS DISCRIMINATION**
- Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
- Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
- BRITTLENESS**
- Rock sampling --- apparatus for controlling particle size
[NASA-CASE-XNP-10007-1] c15 N74-23068
- Rock sampling --- method for controlling particle size distribution
[NASA-CASE-XNP-09755] c15 N74-23069
- BROADBAND**
- Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array, caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
- Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
- Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583
- Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
- Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- Wideband voltage controlled oscillator with high phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
- Multinode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
- BROADBAND AMPLIFIERS**
- Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
- Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415
- BROADCASTING**
- Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194
- BROMINE**
- Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641
- BRUSHES**
- Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XNP-01016] c26 N71-17818
- BUCKLING**
- Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
- Test equipment to prevent buckling of small diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
- BUFFER STORAGE**
- Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675
- Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255
- Digital to analog converter with parallel input/output memory device
[NASA-CASE-KSC-10397] c08 N72-25206
- BUILDINGS**
- Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- BULKHEADS**
- Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMP-01899] c31 N70-41948
- BUOYANCY**
- Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- BURNING RATE**
- Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Development of apparatus for testing burning rate and flammability of materials
[NASA-CASE-XMS-09690] c33 N72-25913
- BURNOUT**
- Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381
- BUTT JOINTS**
- Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860
- Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-XMP-00640] c15 N70-39924

Apparatus for welding sheet material --- butt joints
 [NASA-CASE-XMS-01330] c37 N75-27376
BUTTERFLY VALVES
 Flexible inflatable seal for butterfly valves
 [NASA-CASE-XLE-00101] c15 N70-33376
BYPASSES
 Low power drain transistor feedback circuit
 [NASA-CASE-XGS-04999] c09 N69-24317
 Helical coaxial resonator RF filter
 [NASA-CASE-XGS-02816] c07 N69-24323
 Current regulating voltage divider design with load current shunting
 [NASA-CASE-MPS-20935] c09 N71-34212
 Electrical interconnection of unilluminated solar cells in solar battery array
 [NASA-CASE-GSC-10344-1] c03 N72-27053

C

CABLE FORCE RECORDERS
 Design and characteristics of device for showing amount of cable payed out from winch and load imposed
 [NASA-CASE-MSC-12052-1] c15 N71-24599
CABLES
 Cable guide and restraint device for reefing tubes in uniform manner
 [NASA-CASE-LAR-10129-1] c15 N73-25512
CABLES (ROPES)
 High voltage cable for use in high intensity ionizing radiation fields
 [NASA-CASE-XNP-00738] c09 N70-38201
 Force separation rigid tethering device using cables
 [NASA-CASE-XLA-02332] c32 N71-17609
 Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
 [NASA-CASE-XMP-07587] c15 N71-18701
 Design and construction of satellite appendage tie-down cord
 [NASA-CASE-XGS-02554] c31 N71-21064
 Quick attach mechanism for moving or stationary wires, ropes, or cables
 [NASA-CASE-XPR-05421] c15 N71-22994
 Flexible cable that can be made rigid
 [NASA-CASE-MSC-13512-1] c15 N72-22485
 Guide member for stabilizing cable of open shaft elevator
 [NASA-CASE-KSC-10513] c15 N72-25453
 Reefing system
 [NASA-CASE-LAR-10129-2] c15 N74-20063
 Emergency descent device
 [NASA-CASE-MPS-23074-1] c54 N76-13770
CADMIUM SULFIDES
 High field CdS detector for infrared radiation
 [NASA-CASE-LAR-11027-1] c14 N74-18088
CALCIUM
 Ultrasonic bone densitometer
 [NASA-CASE-MPS-20994-1] c35 N75-12271
CALCIUM FLUORIDES
 Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
 [NASA-CASE-XMS-00259] c18 N70-36400
 Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
 [NASA-CASE-XLE-08511-2] c18 N71-16105
CALCIUM PHOSPHATES
 Process for preparing calcium phosphate salts for tooth repair
 [NASA-CASE-ERC-10338] c04 N72-33072
CALCULATORS
 Sun angle calculator
 [NASA-CASE-MSC-12617-1] c35 N75-15019
CALIBRATING
 Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
 [NASA-CASE-XLA-00781] c09 N71-22999
 Combination pressure transducer-calibrator assembly for measuring fluid
 [NASA-CASE-XNP-01660] c14 N71-23036
 Control system for pressure balance device used in calibrating pressure gages
 [NASA-CASE-XMP-04134] c14 N71-23755

Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
 [NASA-CASE-IKS-10804] c05 N71-24606
 Calibrator for measuring and modulating or demodulating laser outputs
 [NASA-CASE-XLA-03410] c16 N71-25914
 Plastic sphere for radar tracking and calibration
 [NASA-CASE-XLA-11154] c07 N72-21117
 Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
 [NASA-CASE-IGS-07752] c14 N73-30390
 System for calibrating pressure transducer
 [NASA-CASE-LAR-10910-1] c14 N74-13132
 In situ transfer standard for ultrahigh vacuum gage calibration
 [NASA-CASE-LAR-10862-1] c14 N74-15092
 High temperature strain gage calibration fixture
 [NASA-CASE-LAR-11500-1] c35 N75-13227
 Ergometer calibrator --- for any ergometer utilizing rotating shaft
 [NASA-CASE-MPS-21045-1] c35 N75-15932
 Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
 [NASA-CASE-LAR-11435-1] c35 N76-15432
CALORIMETERS
 Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
 [NASA-CASE-XMP-04208] c33 N71-29051
 Heat flow calorimeter --- measures output of Ni-Cd batteries
 [NASA-CASE-GSC-11434-1] c14 N74-27859
CAMERA SHUTTERS
 Electrically operated rotary shutter for television camera aboard spacecraft
 [NASA-CASE-XNP-00637] c14 N70-40273
 Magnetically opened diaphragm design with camera shutter and expansion tube applications
 [NASA-CASE-XLA-03660] c15 N71-21060
 Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
 [NASA-CASE-NPO-10758] c14 N73-14427
 Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
 [NASA-CASE-GSC-11560-1] c09 N74-20861
CAMERAS
 Mechanism for measuring nanosecond time differences between luminous events using streak camera
 [NASA-CASE-XLA-01987] c23 N71-23976
 Camera adapter design for image magnification including lens and illuminator
 [NASA-CASE-XMP-03844-1] c14 N71-26474
 Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
 [NASA-CASE-LAR-10686] c14 N71-28935
 Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
 [NASA-CASE-NPO-10417] c16 N71-33410
 Optical scanner with linear housing and rotating camera
 [NASA-CASE-NPO-11002] c14 N72-22441
 Apparatus for on-film optical recording of camera lens aperture and focus setting
 [NASA-CASE-MSC-12363-1] c14 N73-26431
 Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
 [NASA-CASE-LAR-10319-1] c14 N73-32322
 Real time moving scene holographic camera system
 [NASA-CASE-MPS-21087-1] c14 N74-17153
 Automatic focus control for facsimile cameras
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[NASA-CASE-XGS-00769] c14 N70-41647
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[NASA-CASE-GSC-10065-1] c10 N71-27136
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[NASA-CASE-ARC-10192] c09 N72-21245
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[NASA-CASE-XGS-00886] c03 N71-11053
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[NASA-CASE-LEW-11227-1] c73 N75-30876
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[NASA-CASE-XHQ-03903] c15 N69-21922
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[NASA-CASE-XFE-00811] c15 N70-36901
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[NASA-CASE-XNP-00876] c28 N70-41311
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CATHODE RAY TUBES

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[NASA-CASE-XNP-00449] c14 N70-35220

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[NASA-CASE-MSC-12593-1] c17 N76-21250

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[NASA-CASE-NPO-13545-1] c32 N75-26207
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[NASA-CASE-XNP-06028] c09 N71-23189
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[NASA-CASE-XAC-05506-1] c24 N71-16095
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[NASA-CASE-HQN-10876-1] c35 N75-19621
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[NASA-CASE-XLA-01781] c14 N69-39975
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[NASA-CASE-XLA-01794] c33 N71-21586
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[NASA-CASE-XNP-09451] c06 N71-26754
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[NASA-CASE-NPO-10774] c06 N72-17095
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[NASA-CASE-ARC-10344-1] c14 N72-21433
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[NASA-CASE-ARC-10443-1] c14 N73-20477
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[NASA-CASE-NPO-10893] c27 N73-22710
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[NASA-CASE-XNP-05082] c15 N70-41960
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[NASA-CASE-XKS-03381] c09 N71-22796
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[NASA-CASE-XKS-04631] c10 N71-23663
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[NASA-CASE-MSC-11277] c09 N71-29008
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[NASA-CASE-XGS-01110] c07 N69-24334
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[NASA-CASE-XGS-03095] c09 N69-27463
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
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[NASA-CASE-MFS-06074] c15 N71-20393
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[NASA-CASE-XKS-03381] c09 N71-22796
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[NASA-CASE-ARC-10042-2] c10 N72-11256
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[NASA-CASE-XGS-00174] c08 N70-34743
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[NASA-CASE-XNP-04780] c08 N71-19687
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Bridge-type gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241

Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463

CONTROL ROCKETS

SUBJECT INDEX

- Digital controller for a Baum folding machine
--- providing automatic counting and machine
shutoff
[NASA-CASE-LAR-10688-1] c15 N74-21056
- Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c15 N74-21065
- Inrush current limiter --- control circuit
[NASA-CASE-GSC-11789-1] c33 N75-16748
- Variable ratio mixed-mode bilateral master-slave
control system for shuttle remote manipulator
system
[NASA-CASE-MSC-14245-1] c18 N75-27041
- Control for nuclear thermionic power source ---
power supply circuits, energy policy
[NASA-CASE-NPO-13114-2] c44 N76-15573
- Transonic and supersonic aircraft wherein the
problems of roll control at high angles of
attack are minimized
[NASA-CASE-LAR-11868-1] c08 N76-19159
- CONTROL ROCKETS**
- Unit for generating thrust from catalytic
decomposition of hydrogen peroxide, for high
altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
- CONTROL RODS**
- Nuclear reactor control rod assembly with
improved driving mechanism
[NASA-CASE-XLE-00298] c22 N70-34501
- Manual control mechanism for adjusting control
rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- CONTROL STABILITY**
- Design and development of active control system
for air cushion vehicle to reduce or eliminate
effects of excessive vertical vibratory
acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
- CONTROL SURFACES**
- Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Attitude control system for spacecraft based on
conversion of incident solar radiation on
movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855
- CONTROL UNITS (COMPUTERS)**
- Self testing and repairing computer comprising
control and diagnostic unit and rollback
points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
- CONTROL VALVES**
- Electromechanical actuator and its use in rocket
thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
- Multiple orifice fluid flow control valve to
provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867
- Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Control valve and coaxial variable injector for
controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654
- Control valve for switching main stream of fluid
from one stable position to another by means
of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332
- Force balanced throttle valve for fuel control
in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
- Dual stage check valve for cryogenic supply
systems used in space flight environmental
control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
- Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
- Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c37 N75-25185
- CONTROLLED ATMOSPHERES**
- Rectangular electric conductors for conductor
cables to withstand spacecraft vibration and
controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
- High voltage pulse generator for testing flash
and ignition limits of nonmetallic materials
in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- System for continuous monitoring of exhalations,
weighing, and cage cleaning for animal exposed
to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875
- CONTROLLERS**
- Unitary three-axis controller for flight
vehicles within or outside atmosphere
[NASA-CASE-IPR-00181] c21 N70-33279
- Two axis flight controller with potentiometer
control shafts directly coupled to rotatable
ball members
[NASA-CASE-IPR-04104] c03 N70-42073
- Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255
- Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c03 N74-10942
- CONVECTIVE FLOW**
- Design and development of device to prevent
geysering during convective circulation of
cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- CONVECTIVE HEAT TRANSFER**
- Thin film gauge --- for measuring convective
heat transfer rates along test surfaces in
wind tunnels
[NASA-CASE-NPO-10617-1] c14 N74-22095
- CONVERGENCE**
- Electrical device for developing converging
spherical shock waves
[NASA-CASE-MFS-20890] c14 N72-22439
- CONVERGENT-DIVERGENT NOZZLES**
- Gimballed partially submerged nozzle for solid
propellant rocket engines for providing
directional control
[NASA-CASE-XNF-01544] c28 N70-34162
- Regenerative cooling system for rocket
combustion chamber using coolant tubes in
convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968
- CONVERTERS**
- Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391
- COOLANTS**
- Simulated fuel assembly-type flow measurement
apparatus for coolant flow in reactor core
[NASA-CASE-XLE-00724] c14 N70-34669
- COOLING**
- Microwave power receiving antenna solving heat
dissipation problems by construction of
elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
- Dissipative voltage regulator system for
minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626
- Cooling and radiation protection of ruby lasers
using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440
- COOLING SYSTEMS**
- Automatic thermal switch for improving
efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467
- Differential thermopile for measuring cooling
water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598
- Electric power system with circulatory liquid
coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807
- Portable cryogenic cooling system design
including turbine pump, cooling chamber, and
atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
- Development and characteristics of natural
circulation radiator for use with nuclear
power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046
- Development and characteristics of cooling
system to maintain temperature of rack mounted
electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Development of method for cooling high
temperature wall members with cooling medium
having high heat absorption capability
[NASA-CASE-HQN-00938] c33 N71-29053
- Apparatus for liquid spray cooling of turbine
blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Radial heat flux transformer for use in heating
and cooling processes

- [NASA-CASE-NPO-10828] c33 N72-17948
Light shield and cooling apparatus --- high intensity ultraviolet lamp
- [NASA-CASE-LAR-10089-1] c15 N74-23066
Heat exchanger --- rocket combustion chambers and cooling systems
- [NASA-CASE-LEW-12252-1] c34 N75-19579
Cryostat system for temperatures on the order of 2 deg K or less
- [NASA-CASE-NPO-13459-1] c31 N75-29277
Refrigerated coaxial coupling --- for microwave equipment
- [NASA-CASE-NPO-13504-1] c33 N75-30430
Tubular sublimator/evaporator heat sink
- [NASA-CASE-ARC-10912-1] c44 N76-13599
Rocket chamber and method of making
- [NASA-CASE-LEW-11118-2] c20 N76-14191
Closed loop spray cooling apparatus --- for particle accelerator targets
- [NASA-CASE-LEW-11981-1] c37 N76-20486
- COORDINATES**
Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-INP-00614] c14 N70-36907
System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- COPOLYMERS**
Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-INP-02584] c06 N71-20905
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-INP-03250] c06 N71-23500
- COPPER**
Development of method for etching copper
[NASA-CASE-IGS-06306] c17 N71-16044
Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Brazing alloy composition
[NASA-CASE-INP-06053] c26 N75-27126
- COPPER ALLOYS**
A zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N75-26087
- COPPER COMPOUNDS**
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-INP-01960] c09 N71-23027
Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MPS-20180] c16 N72-12440
Brazing alloy
[NASA-CASE-INP-03878] c26 N75-27127
- COPPER FLUORIDES**
Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093
- CORDAGE**
Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- CORE STORAGE**
Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-ERC-10307] c08 N72-21198
- CORES**
Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c15 N74-15128
- CORRECTION**
Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-IGS-02749] c07 N69-39978
- CORRELATION DETECTION**
Correlation type phase detector --- with time correlation integrator for frequency multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243
- CORRELATORS**
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-INP-09832] c30 N71-23723
- CORROSION PREVENTION**
Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393
Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion
[NASA-CASE-XLA-07390] c15 N71-18616
Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NPO-12122-1] c24 N76-14203
- CORROSION RESISTANCE**
High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-INP-03459-2] c18 N71-15688
High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025
Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-INP-03459] c15 N71-21078
- COSINE SERIES**
Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- COSMIC DUST**
Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
- COST REDUCTION**
Low cost solar energy collection system
[NASA-CASE-NPO-13579-1] c44 N75-28519
- COUCHES**
Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12343
Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
- COULOMETERS**
Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-IGS-05434] c03 N71-20491
Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719
- COUNTERS**
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-INP-06234] c10 N71-27137
Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
- COUNTING CIRCUITS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits

COUPLED MODES

SUBJECT INDEX

- [NASA-CASE-XGS-08266] c14 N69-27432
Design of transistorized ring counter circuit with special steering and triggering circuits
- [NASA-CASE-XGS-03095] c09 N69-27463
Counter-divider circuit for accuracy and reliability in binary circuits
- [NASA-CASE-XMP-00421] c09 N70-34502
Reversible ring counter using cascaded single silicon controlled rectifier stages
- [NASA-CASE-XGS-01473] c09 N71-10673
Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
- [NASA-CASE-XLE-01246] c14 N71-10797
Electronic counter circuit utilizing magnetic core and low power consumption
- [NASA-CASE-XNP-08836] c09 N71-12515
Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
- [NASA-CASE-XGS-02440] c08 N71-19432
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
- [NASA-CASE-XMS-02399] c05 N71-22896
Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
- [NASA-CASE-XNP-01753] c08 N71-22897
Noninterruptible digital counter circuit design with display device for pulse frequency modulation
- [NASA-CASE-XNP-09759] c08 N71-24891
Diode-quad bridge circuit means
- [NASA-CASE-ARC-10364-2(B)] c09 N74-14941
Frequency measurement by coincidence detection with standard frequency
- [NASA-CASE-MSC-14649-1] c33 N76-16331
- COUPLED MODES**
Dual mode solid state power switch
[NASA-CASE-MPS-22880-1] c33 N75-19536
- COUPLING**
Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846
Base support for expansible and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
- COUPLING CIRCUITS**
Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-IGS-03058] c10 N71-19547
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28030
Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MPS-21660-1] c14 N74-21017
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520
Rotating joint signal coupler
[NASA-CASE-LAR-11264-1] c33 N75-27261
- COUPLINGS**
Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927
Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490
Space vehicle stage coupling and quick release separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679
Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808
Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
Ratchet mechanism for high speed operation at reduced backlash
- [NASA-CASE-MPS-12805] c15 N71-17805
Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MPS-20395] c15 N71-24903
Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482
Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NPO-13504-1] c33 N75-30430
- COVERINGS**
Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XMP-04132] c15 N69-27502
- CRACKING (FRACTURING)**
Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393
- CRASH LANDING**
Aircraft mounted crash activated transmitter device
[NASA-CASE-MPS-16609-3] c09 N74-34647
- CRREP RUPTURE STRENGTH**
Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
- CRITICAL EXPERIMENTS**
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- CROSSED FIELDS**
Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- CROSSLINKING**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579
- CRUCIBLES**
Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
- CRUDE OIL**
Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
- CRYOGENIC EQUIPMENT**
Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190
Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935
Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MPS-10340] c15 N71-17628
Dual solid cryogens for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453
Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13547-1] c15 N73-30459
Heat operated cryogenic electrical generator
[NASA-CASE-NPO-13303-1] c20 N75-24837
Insulation for piping
[NASA-CASE-MSC-19523-1] c31 N76-16245
A device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-MPS-23281-1] c35 N76-18413

CRYOGENIC FLUID STORAGE

- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
- Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41871
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
- Prefabricated multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogenics
[NASA-CASE-XLE-04222] c23 N71-22881
- Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
- Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMP-05046] c33 N71-28892
- Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093

CRYOGENIC FLUIDS

- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
- Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
- Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
- High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
- Automatic thermal switch for improving efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
- Development of apparatus for measuring thermal conductivity
[NASA-CASE-XGS-01052] c14 N71-15992
- Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
- Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-RSC-10615] c15 N73-12486
- Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c15 N74-27904
- CRYOGENIC GYROSCOPES**
Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-MFS-21136-1] c23 N74-18323
- CRYOGENIC MAGNETS**
Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890

CRYOGENIC ROCKET PROPELLANTS

- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- CRYOGENIC STORAGE**
Light weight plastic foam thermal insulation for cryogenic storage
[NASA-CASE-XLE-02647] c18 N71-23658
- Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
- CRYOGENICS**
High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XMP-02786] c17 N71-20743
- Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
- CRYOLITE**
Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332
- CRYOSTATS**
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659
- Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMP-10968] c14 N71-24234
- Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c14 N74-15093
- Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N75-29277
- CRYSTAL FILTERS**
Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111
- CRYSTAL GROWTH**
Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015
- Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466
- Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740
- Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054
- Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
- Method of crystallization --- for semiconductor materials used to manufacture electronic components
[NASA-CASE-MFS-23001-1] c76 N75-32928
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 [NASA-CASE-NPO-11243] c07 N72-20154

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 [NASA-CASE-XNP-05835] c08 N71-12504

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 [NASA-CASE-XLA-01584] c14 N71-23269

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[NASA-CASE-GSC-11824-1] c33 N75-27254
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[NASA-CASE-NPO-10634] c23 N72-25619

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deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229

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deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809

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nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
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[NASA-CASE-XLA-01583] c02 N70-36825
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[NASA-CASE-GSC-10062] c14 N71-15605

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application of mechanical stresses and
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[NASA-CASE-LAR-10270-1] c32 N72-25877

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vibrating in more than one degree of freedom
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[NASA-CASE-LAR-10083-1] c15 N71-27006
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[NASA-CASE-XNP-01160] c07 N71-11298
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[NASA-CASE-NSC-12165-1] c07 N71-33696
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apparatus --- for generating rectified output
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[NASA-CASE-FRC-10072-1] c09 N74-14939

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fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Measuring density of single and two-phase
cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
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rocket engine by increasing beam density

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 [NASA-CASE-ARC-10631-1] c74 N76-20958

DENSITY MEASUREMENT
 Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
 [NASA-CASE-XLE-00143] c14 N70-36618
 Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
 [NASA-CASE-XLE-00688] c14 N70-41330
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 [NASA-CASE-LAR-11059-1] c76 N75-12810

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 [NASA-CASE-ERC-10338] c04 N72-33072

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 Extendable, self-deploying boom apparatus
 [NASA-CASE-GSC-10566-1] c15 N72-18477
 Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
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 [NASA-CASE-XNP-00595] c15 N70-34967
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 [NASA-CASE-MFS-20675] c26 N73-26751
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 [NASA-CASE-LEW-10906-1] c06 N74-30502
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 [NASA-CASE-ARC-10643-2] c51 N75-13506

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 [NASA-CASE-MFS-23074-1] c54 N76-13770

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 [NASA-CASE-HSC-12084-1] c12 N71-17569
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 [NASA-CASE-LAR-10323-1] c12 N71-17573
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 [NASA-CASE-XLA-05906] c31 N71-16221
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 [NASA-CASE-XMP-06531] c14 N71-17575
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 [NASA-CASE-XNP-01059] c23 N71-21821
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 [NASA-CASE-MFS-15063] c14 N72-25412
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 [NASA-CASE-HSC-13530-2] c23 N75-14834

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 [NASA-CASE-NPO-11743-1] c33 N74-27425

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 [NASA-CASE-NPO-11322] c06 N72-25146
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 [NASA-CASE-LEW-10518-3] c15 N74-10476

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 [NASA-CASE-MFS-20407] c09 N73-19235

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 [NASA-CASE-XMP-04133] c06 N71-20717
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 [NASA-CASE-MFS-13994-2] c06 N72-25148
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 [NASA-CASE-LEW-11325-1] c06 N73-27980

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 [NASA-CASE-MFS-20698] c15 N72-20446
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 [NASA-CASE-MFS-20698-2] c15 N73-19457

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 [NASA-CASE-XMS-01546] c14 N70-40233
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 [NASA-CASE-XLA-02651] c28 N70-41967
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 [NASA-CASE-XAC-00731] c11 N71-15960
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 [NASA-CASE-XLA-03660] c15 N71-21060
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 [NASA-CASE-XAC-02981] c14 N71-21072
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[NASA-CASE-XNP-09750] c14 N69-39937
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[NASA-CASE-XMP-00517] c03 N70-34157
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[NASA-CASE-XMS-04312] c07 N71-22984
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[NASA-CASE-XNP-08880] c09 N71-24808
Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065
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[NASA-CASE-NPO-13171-1] c07 N74-11000
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[NASA-CASE-GSC-10366-1] c10 N71-18772
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[NASA-CASE-XMF-05844] c14 N71-17587
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[NASA-CASE-XMS-05894-1] c15 N69-21924
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[NASA-CASE-XMF-04132] c15 N69-27502
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Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
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[NASA-CASE-LAR-10204] c14 N71-27215
- DIFFRACTOMETERS**
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[NASA-CASE-XNP-05231] c14 N73-28491
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Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c23 N73-32538
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[NASA-CASE-ERC-10072] c09 N70-11148
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[NASA-CASE-XLE-10337] c15 N71-24046
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[NASA-CASE-LAR-10385-2] c23 N74-13436
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[NASA-CASE-GSC-10518-1] c15 N72-22489
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[NASA-CASE-ARC-10447-1] c05 N74-22771
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[NASA-CASE-GSC-10303] c15 N72-22487
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[NASA-CASE-MFS-20482] c15 N72-22492
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[NASA-CASE-LW-11388-1] c15 N73-32358
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[NASA-CASE-MSC-14435-1] c37 N76-18455
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[NASA-CASE-XGS-02317] c09 N71-23525
System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XMF-06892] c09 N71-24805
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[NASA-CASE-NPO-11088] c08 N71-29034
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[NASA-CASE-LAR-10590-1] c15 N70-26819
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[NASA-CASE-NPO-10112] c08 N71-12502
Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
Digital computer system for automatic prelaunch checkout of spacecraft
[NASA-CASE-XKS-08012-2] c31 N71-15566
Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749
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DIGITAL DATA

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 [NASA-CASE-XNP-01012] c08 N71-28925
 Redundant memory for enhanced reliability of
 digital data processing system
 [NASA-CASE-GSC-10564] c10 N71-29135
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 binary coded decimal number of higher multiple
 [NASA-CASE-KSC-10595] c08 N73-12176
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 controlled minority of clock elements
 [NASA-CASE-MSC-12531-1] c35 N75-30504
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 and computing devices
 [NASA-CASE-GSC-11839-2] c60 N76-18803
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 and computing devices --- analog to digital
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 [NASA-CASE-GSC-11839-3] c60 N76-18804

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 pseudo-noise synchronization code modulated
 with digital data into single channel for
 spacecraft communication
 [NASA-CASE-XNP-00911] c08 N70-41961
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 [NASA-CASE-XNP-09453] c08 N71-19420
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 tape recorder wow and flutter noise during
 playback
 [NASA-CASE-XGS-01812] c07 N71-23001
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 [NASA-CASE-XNP-01068] c10 N71-28739
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 [NASA-CASE-NPO-10844] c07 N72-20140
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 telemetry data using analog converter to
 digitize sensed parameter values
 [NASA-CASE-NPO-11016] c08 N72-31226
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 order using optical techniques
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DIGITAL FILTERS
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 [NASA-CASE-XGS-03502] c10 N71-20852
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 [NASA-CASE-NPO-11088] c08 N71-29034
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 [NASA-CASE-NPO-11821-1] c08 N73-26175
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 [NASA-CASE-MPS-22729-1] c32 N76-21366

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 digital spacecraft communication
 [NASA-CASE-XNP-01472] c14 N70-41807

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 attitude control of earth satellites or space
 probes
 [NASA-CASE-XGS-00359] c14 N70-34158
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 [NASA-CASE-XGS-00689] c08 N70-34787
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 tape recorder wow and flutter noise during
 playback
 [NASA-CASE-XGS-01812] c07 N71-23001
 Reliable magnetic core circuit apparatus with
 application in selection matrices for digital
 memories
 [NASA-CASE-XNP-01318] c10 N71-23033
 Noninterruptable digital counter circuit design
 with display device for pulse frequency
 modulation
 [NASA-CASE-XNP-09759] c08 N71-24891
 Digital memory system with multiple switch cores
 for driving each word location
 [NASA-CASE-XNP-01466] c10 N71-26434
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 [NASA-CASE-NPO-11130] c08 N72-20176

Digital function generator for generating any
 arbitrary single valued function
 [NASA-CASE-NPO-11104] c08 N72-22165
 Digital video system for displaying image and
 alphanumeric data on cathode ray tube
 [NASA-CASE-NPO-11342] c09 N72-25248
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 threshold test and digital techniques
 [NASA-CASE-NPO-11630] c08 N72-33172
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 pulse from clock source to derive binary
 singles to show state of various indicators in
 processor
 [NASA-CASE-GSC-10975-1] c08 N73-13187
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 deep space network communication system
 [NASA-CASE-NPO-11569] c10 N73-26229
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 [NASA-CASE-XNP-03623] c09 N73-28084
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 [NASA-CASE-NPO-11905-1] c08 N74-12887
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 --- providing automatic counting and machine
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 [NASA-CASE-LAR-10688-1] c15 N74-21056
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 [NASA-CASE-MSC-14558-1] c32 N75-21486
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 [NASA-CASE-MSC-12709-1] c33 N76-13377
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 network --- of digital tape drive systems
 [NASA-CASE-GSC-11925-1] c33 N76-18353
 Multiple rate digital command detection system
 with range clean-up capability
 [NASA-CASE-NPO-13753-1] c61 N76-18826

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 logic circuits and supplying single binary
 output signal
 [NASA-CASE-MPS-14322] c08 N71-18692
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 in single module
 [NASA-CASE-XLA-07732] c08 N71-18751
 Horizon sensor design with digital sampling of
 spaced radiation-compensated thermopile
 infrared detectors
 [NASA-CASE-XNP-06957] c14 N71-21088
 Digital cardiometer incorporating circuit
 for measuring heartbeat rate of subject over
 predetermined portion of one minute also
 converting rate to beats per minute
 [NASA-CASE-XMS-02399] c05 N71-22896
 Digital synchronizer for extracting binary data
 in receiver of PSK/PCM communication system
 [NASA-CASE-NPO-10851] c07 N71-24613
 Digital sensor for counting fringes produced by
 interferometers with improved sensitivity and
 one photomultiplier tube to eliminate
 alignment problem
 [NASA-CASE-LAR-10204] c14 N71-27215
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 automatically displaying digits in any desired
 order using optical techniques
 [NASA-CASE-XKS-00348] c09 N73-14215
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 data
 [NASA-CASE-LAR-10128-1] c08 N73-20217
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 [NASA-CASE-MSC-13912-1] c07 N74-30524
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 [NASA-CASE-GSC-11623-1] c33 N75-25040

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 augmented digital to analog converter for
 computed time-dependent data
 [NASA-CASE-XLA-07828] c08 N71-27057
 Digital to analog converter with parallel
 input/output memory device
 [NASA-CASE-KSC-10397] c08 N72-25206
 Digital to analog converter for sampled signal
 reconstruction
 [NASA-CASE-MSC-12458-1] c08 N73-32081

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 reconstruction
 [NASA-CASE-MSC-12458-1] c08 N73-32081

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polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
 [NASA-CASE-MFS-10512] c06 N73-30099
 Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
 [NASA-CASE-MFS-10506] c06 N73-30100
 Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
 [NASA-CASE-MFS-10509] c06 N73-30103

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 Projection system for display of parallax and perspective
 [NASA-CASE-MFS-23194-1] c74 N76-13909

DIODES
 Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
 [NASA-CASE-XKS-03381] c09 N71-22796
 Maintaining current flow through solar cells with open connection using shunting diode
 [NASA-CASE-XLE-04535] c03 N71-23354
 Gunn effect microwave diodes with RF shielding
 [NASA-CASE-ERC-10119] c26 N72-21701
 Transistorized switching logic circuits with tunnel diodes
 [NASA-CASE-GSC-10878-1] c10 N72-22236
 Development of method and apparatus for detecting surface ions on silicon diodes and transistors
 [NASA-CASE-ERC-10325] c15 N72-25457
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 [NASA-CASE-ARC-10467-1] c09 N73-14214
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 [NASA-CASE-ERC-10224-2] c09 N73-27150
 Diode-quad bridge circuit means
 [NASA-CASE-ARC-10364-2(B)] c09 N74-14941
 High isolation RF signal selection switches
 [NASA-CASE-NPO-13081-1] c07 N74-22814
 Electronic analog divider
 [NASA-CASE-LEW-11881-1] c33 N75-28316

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 Circularly polarized antenna with linearly polarized pair of elements
 [NASA-CASE-ERC-10214] c09 N72-31235

DIRECT CURRENT
 Regulated dc to dc converter
 [NASA-CASE-XGS-03429] c03 N69-21330
 Automatic control of voltage supply to direct current motor
 [NASA-CASE-XMS-04215-1] c09 N69-39987
 Thermionic diode switch for use in high temperature region to chop current from dc source
 [NASA-CASE-NPO-10404] c03 N71-12255
 Transistorized dc-coupled multivibrator with noninverted output signal
 [NASA-CASE-XNP-09450] c10 N71-18723
 Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
 [NASA-CASE-GSC-10366-1] c10 N71-18772
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 [NASA-CASE-GSC-10041-1] c10 N71-19418
 Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
 [NASA-CASE-XLA-03103] c25 N71-21693
 Conversion of positive dc voltage to positive dc voltage of lower amplitude
 [NASA-CASE-XMP-14301] c09 N71-23188
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 [NASA-CASE-XMP-08217] c03 N71-23239
 Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
 [NASA-CASE-XMS-06061] c05 N71-23317
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 [NASA-CASE-XGS-01418] c09 N71-23573

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
 [NASA-CASE-MFS-20385] c09 N71-24904
 Inverters for changing direct current to alternating current
 [NASA-CASE-XGS-06226] c10 N71-25950
 Circuits for controlling reversible dc motor
 [NASA-CASE-XNP-07477] c09 N71-26092
 Feedback control for direct current motor to achieve constant speed under varying loads
 [NASA-CASE-MFS-14610] c09 N71-28886
 High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
 [NASA-CASE-LEW-10155-1] c09 N71-29035
 Power converters for supplying direct current at one voltage from source at another voltage
 [NASA-CASE-XER-11046] c09 N72-22203
 Dc to ac to dc converter with transistor driven synchronous rectifiers
 [NASA-CASE-GSC-11126-1] c09 N72-25253
 Direct current motor including stationary field windings and stationary armature winding
 [NASA-CASE-XGS-07805] c15 N72-33476
 Powerplexer for distribution of dc power levels to loads which require different voltages
 [NASA-CASE-MSC-12396-1] c03 N73-31988
 Bio-isolated dc operational amplifier --- for bioelectric measurements
 [NASA-CASE-ARC-10596-1] c09 N74-21851
 Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
 [NASA-CASE-XER-11046-2] c09 N74-22864

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 Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
 [NASA-CASE-XLE-00212] c03 N70-34134
 Thermal pump-compressor for converting solar energy
 [NASA-CASE-XLA-00377] c33 N71-17610
 Converting output of positive dc voltage source to negative dc voltage across load with common reference point
 [NASA-CASE-XMP-08217] c03 N71-23239
 Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
 [NASA-CASE-ERC-10125] c09 N71-24893
 Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
 [NASA-CASE-XER-11046-2] c09 N74-22864

DIRECTIONAL ANTENNAS
 Mechanical coordinate converter for use with spacecraft tracking antennas
 [NASA-CASE-XNP-00614] c14 N70-36907
 Weatherproof helix antenna
 [NASA-CASE-XKS-08485] c07 N71-19493
 Tracking antenna system with array for synchronous safeelite or ground based radar
 [NASA-CASE-GSC-10553-1] c07 N71-19854
 Drive system for parabolic tracking antenna with reversible motion and minimal backlash
 [NASA-CASE-NPO-10173] c15 N71-24696
 Variable beamwidth antenna --- with multiple beam, variable feed system
 [NASA-CASE-GSC-11862-1] c32 N76-18295

DIRECTIONAL CONTROL
 Gimballed partially submerged nozzle for solid propellant rocket engines for providing directional control
 [NASA-CASE-XMP-01544] c28 N70-34162
 Omnidirectional wheel
 [NASA-CASE-MFS-21309-1] c15 N74-18125

DIRECTIONAL STABILITY
 Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
 [NASA-CASE-XLA-01804] c02 N70-34160
 System for imposing directional stability on a rocket-propelled vehicle
 [NASA-CASE-MFS-21311-1] c20 N76-21275

DISCONNECT DEVICES
 Patent data on gas actuated bolt disconnect assembly
 [NASA-CASE-XLA-00326] c03 N70-34667

DISCONTINUITY

Remotely actuated quick disconnect mechanism for umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258

Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259

Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789

Split nut and bolt separation device
[NASA-CASE-INP-06914] c15 N71-21489

Electrical circuit selection device for simulating stage separation of flight vehicle
[NASA-CASE-XRS-04631] c10 N71-23663

Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MPS-20395] c15 N71-24903

Breakaway multiwire electrical cable connector with particular application for umbilical type cables
[NASA-CASE-NPO-11140] c15 N72-17455

Torsional disconnect device for releasably coupling distal ends of fluid conduits
[NASA-CASE-NPO-10704] c15 N72-20445

Frangible connecting link suitable for rocket stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488

Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450

Quick disconnect filter coupling
[NASA-CASE-MPS-22323-1] c37 N76-14463

DISCONTINUITY

Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360

DISCRIMINATORS

Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-INP-00701] c09 N70-40272

Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-INP-08274] c10 N71-13537

Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-MPS-14322] c08 N71-18692

Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XNS-03478] c14 N71-21040

Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-INP-04819] c08 N71-23295

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

DISPENSERS

Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-MPS-20829] c12 N72-21310

Potable water dispenser
[NASA-CASE-MPS-21115-1] c05 N74-12779

Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c15 N74-13178

Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MPS-21163-1] c05 N74-17853

Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c54 N75-32766

DISPERSING

Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911

DISPERSIONS

Method for producing alkali metal dispersions of high purity
[NASA-CASE-INP-08876] c17 N73-28573

Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ARC-10896-1] c34 N75-32389

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DISPLACEMENT

Binetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c15 N74-15126

DISPLACEMENT MEASUREMENT

Null-type vacuum microbalance for measuring minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180

Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999

Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740

Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NPO-10778] c14 N72-11364

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338

DISPLAY DEVICES

Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507

Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XPR-00756] c02 N71-13421

Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603

Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571

Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-INP-03853] c23 N71-21882

Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175

Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890

Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-INP-09759] c08 N71-24891

Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544

Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519

System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164

Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248

Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842

Development and characteristics for automatically displaying digits in any desired order using optical techniques
[NASA-CASE-XKS-00348] c09 N73-14215

Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474

Device for displaying and recording angled views of samples to be viewed by microscope
[NASA-CASE-GSC-11690-1] c14 N73-28499

Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143

Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c07 N74-15831

Rotating raster generator
[NASA-CASE-FRC-10071-1] c07 N74-20813

G-load measuring and indicator apparatus --- for aircraft

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[NASA-CASE-ARC-10806] c14 N74-27872
 Field sequential stereo television
 [NASA-CASE-MSC-12616-1] c07 N74-32601
 X-Y alphanumeric character generator for
 oscilloscopes
 [NASA-CASE-GSC-11582-1] c33 N75-19517
 Binocular attachment --- for display of
 numerical information in the field of view of
 the binoculars
 [NASA-CASE-LAR-11782-1] c35 N75-30516
 Full color hybrid display for aircraft simulators
 [NASA-CASE-ARC-10903-1] c09 N76-10148
 Projection system for display of parallax and
 perspective
 [NASA-CASE-MFS-23194-1] c74 N76-13909

DISSIPATION
 Dissipative voltage regulator system for
 minimizing heat dissipation
 [NASA-CASE-GSC-10891-1] c10 N71-26626

DISSOLVING
 Apparatus for mixing two or more liquids under
 zero gravity conditions
 [NASA-CASE-LAR-10195-1] c15 N73-19458

DISTANCE MEASURING EQUIPMENT
 Binary coded sequential acquisition ranging
 system for distance measurements
 [NASA-CASE-NPO-11194] c08 N72-25209
 Apparatus for determining distance to lighting
 strokes from single station by magnetic and
 electric field sensing antennas
 [NASA-CASE-KSC-10698] c07 N73-20175

DISTILLATION EQUIPMENT
 Utilization of solar radiation by solar still
 for converting salt and brackish water into
 potable water
 [NASA-CASE-XMS-04533] c15 N71-23086
 Purification apparatus for vaporization and
 fractional distillation of liquids
 [NASA-CASE-XNP-08124] c15 N71-27184
 U shaped heated tube for distillation and
 purification of liquid metals
 [NASA-CASE-XNP-08124-2] c06 N73-13129

DISTRIBUTED AMPLIFIERS
 Broadband distribution amplifier with
 complementary pair transistor output stages
 [NASA-CASE-NPO-10003] c10 N71-26415

DISTRIBUTORS
 High voltage distributor
 [NASA-CASE-GSC-11849-1] c33 N76-16332

DIVERGENT NOZZLES
 Jet exhaust noise suppressor
 [NASA-CASE-LEW-11286-1] c02 N74-27490

DIVIDERS
 A synchronous binary array divider
 [NASA-CASE-ERC-10180-1] c08 N74-20836

DOCUMENT STORAGE
 Describing device for flagging punched business
 cards
 [NASA-CASE-XLA-02705] c08 N71-15908

DOORS
 Design and specifications of emergency escape
 system for spacecraft structures
 [NASA-CASE-MSC-12086-1] c05 N71-12345

DOPPLER EFFECT
 Doppler frequency shift correction device for
 multiplex communication with Applications
 Technology Satellites
 [NASA-CASE-XGS-02749] c07 N69-39978
 Describing laser Doppler velocimeter for
 measuring mean velocity and turbulence of
 fluid flow
 [NASA-CASE-MFS-20386] c21 N71-19212
 Doppler compensated communication system for
 locating supersonic transport position
 [NASA-CASE-GSC-10087-4] c07 N73-20174
 Doppler shift system --- system for measuring
 velocities of radiating particles
 [NASA-CASE-HQN-10740-1] c24 N74-19310

DOPPLER RADAR
 Cooperative Doppler radar system for avoiding
 midair collisions
 [NASA-CASE-LAR-10403] c21 N71-11766

DOSIMETERS
 Development of dosimeter for measuring absorbed
 dose of high energy ionizing radiation
 [NASA-CASE-XLA-03645] c14 N71-20430

DRAG CHUTES
 Deployment system for flexible wing with rigid
 superstructure
 [NASA-CASE-XLA-01220] c02 N70-41863
 Lightweight, variable solidity knitted parachute
 fabric --- for aerodynamic decelerators
 [NASA-CASE-LAB-10776-1] c02 N74-10034

DRAG MEASUREMENT
 Device for measuring drag forces in flight tests
 [NASA-CASE-XLA-00113] c14 N70-33386
 Electric analog for measuring induced drag on
 nonplanar airfoils
 [NASA-CASE-XLA-00755] c01 N71-13410
 Electric analog for measuring induced drag on
 nonplanar airfoils
 [NASA-CASE-XLA-05828] c01 N71-13411
 Impact energy absorber with decreasing
 absorption rate
 [NASA-CASE-XLA-01530] c14 N71-23092

DRAG REDUCTION
 Directed fluid stream for propeller blade
 loading control
 [NASA-CASE-XAC-00139] c02 N70-34856
 Aircraft wheel spray drag alleviator for dual
 tandem landing gear
 [NASA-CASE-XLA-01583] c02 N70-36825

DRIFT (INSTRUMENTATION)
 Automatic measuring and recording of gain and
 zero drift characteristics of electronic
 amplifier
 [NASA-CASE-XMS-05562-1] c09 N69-39986
 Solar radiation direction detector and device
 for compensating degradation of photocells
 [NASA-CASE-XLA-00183] c14 N70-40239

DRILL BITS
 Impact bit for cutting, collecting, and storing
 samples such as lunar rock cuttings
 [NASA-CASE-XNP-01412] c15 N70-42034
 Hole cutter --- drill bits and rotating shaft
 [NASA-CASE-MFS-22649-1] c37 N75-25186

DRILLS
 Rotary impact-type rock drill for recovering
 rock cuttings
 [NASA-CASE-XNP-07478] c14 N69-21923
 Auger-type soil penetrometer for burrowing into
 soil formations
 [NASA-CASE-XNP-05530] c14 N73-32321

DRIVES
 Inverter drive circuit for semiconductor switch
 [NASA-CASE-LEW-10233] c10 N71-27126

DROPS (LIQUIDS)
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 in analysis of droplet propagation in
 mixed-phase fluid stream
 [NASA-CASE-NPO-10985] c14 N73-20478

DRUGS
 Automated analysis of oxidative metabolites
 [NASA-CASE-ARC-10469-1] c25 N75-12086

DRY CELLS
 Energy source with tantalum capacitors in
 parallel and miniature silver oxide button
 cells for initiating pyrotechnic devices on
 spacecraft and rocket vehicles
 [NASA-CASE-LAR-10367-1] c03 N70-26817

DRYING
 Drying chamber for photographic sheet material
 [NASA-CASE-GSC-11074-1] c14 N73-28489

DRYING APPARATUS
 Gas purged dry box glove reducing permeation of
 air or moisture into dry box or isolator by
 diffusion through glove
 [NASA-CASE-XLE-02531] c05 N71-23080

DUCTS
 Quick disconnect duct coupling device for
 single-handed operation
 [NASA-CASE-MFS-20395] c15 N71-24903
 Externally supported internally stabilized
 flexible duct joint
 [NASA-CASE-MFS-19194-1] c37 N76-14460

DUST COLLECTORS
 Device for removing plastic dust cover from
 digital computer disk packs for inspection and
 cleaning
 [NASA-CASE-LAR-10590-1] c15 N70-26819

DYE LASERS
 Infrared tunable dye laser with nonlinear
 wavelength mixing crystal in optical cavity
 [NASA-CASE-ARC-10463-1] c09 N73-32111
 Laser head for simultaneous optical pumping of
 several dye lasers --- with single flash lamp
 [NASA-CASE-LAR-11341-1] c36 N75-19655

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- Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMP-02221] c18 N71-27170
- DYNAMIC CHARACTERISTICS**
Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
- DYNAMIC CONTROL**
Motion restraining device --- for dissipating at a controlled rate the force of a moving body
[NASA-CASE-NPO-13619-1] c37 N75-22748
- DYNAMIC LOADS**
Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
Development and characteristics of device for indicating and recording magnitude of force applied in axial direction
[NASA-CASE-MSC-15626-1] c14 N72-25411
- DYNAMIC MODULUS OF ELASTICITY**
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
- DYNAMIC RESPONSE**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MPS-11204] c14 N71-29134
- DYNAMIC STRUCTURAL ANALYSIS**
Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-ARC-10154-1] c14 N72-22440
- DYNAMIC TESTS**
Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-XMP-01772] c11 N70-41677
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMP-03248] c11 N71-10604
- DYNAMOMETERS**
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Development of thrust dynamometer for measuring performance of jet and rocket engines
[NASA-CASE-XLE-05260] c14 N71-20429
- E**
- EAR**
Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185
- EARTH (PLANET)**
Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- EARTH ATMOSPHERE**
Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- EARTH ORBITS**
Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MPS-20710] c11 N72-23215
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[NASA-CASE-MSC-12391] c30 N73-12884
- ECONOMIC ANALYSIS**
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[NASA-CASE-ERC-10419] c21 N72-21631
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Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062
High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c09 N74-20863
- EJECTION**
Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XMP-04132] c15 N69-27502
- EJECTION SEATS**
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718
- EJECTORS**
Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XMP-00676] c15 N70-38996
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718
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[NASA-CASE-XLA-03538] c15 N71-24897
- ELASTIC BODIES**
Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XMP-09452] c15 N69-27504
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[NASA-CASE-XAC-05632] c32 N71-23971
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[NASA-CASE-MPS-21728-1] c14 N74-27865
- ELASTIC DEFORMATION**
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[NASA-CASE-XLE-01481] c14 N71-10781
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[NASA-CASE-XAC-05632] c32 N71-23971
- ELASTIC MEDIA**
Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
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Elastic universal joint for rocket motor mounting
[NASA-CASE-XMP-00416] c15 N70-36947
Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MPS-20400] c31 N71-18611
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[NASA-CASE-XPR-05302] c15 N71-23254
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[NASA-CASE-NPO-10767-1] c06 N73-33076
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[NASA-CASE-MPS-22189-1] c35 N75-19615
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[NASA-CASE-XMS-05516] c15 N71-17803
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[NASA-CASE-MSC-12116-1] c15 N71-17648
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[NASA-CASE-XMP-04680] c15 N71-19489
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Ultra-flexible biomedical electrode and wires
[NASA-CASE-ARC-10268-3] c05 N74-11901
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panel
[NASA-CASE-LAR-10073-1] c32 N74-23449
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[NASA-CASE-MFS-21049-1] c14 N74-27864
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[NASA-CASE-NPO-13535-1] c37 N75-21637
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a plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N76-17427
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[NASA-CASE-XMP-00392] c15 N70-34814
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[NASA-CASE-XMP-00411] c11 N70-36913
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ablation and heating gases to supersonic or
hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
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fixed arc length for use in high temperature
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[NASA-CASE-YAC-01677] c09 N71-20816
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[NASA-CASE-XLE-04788] c09 N71-22987
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[NASA-CASE-ARC-10266-1] c33 N75-29318
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[NASA-CASE-XGS-03864] c15 N69-24320
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[NASA-CASE-XGS-05432] c03 N71-19438
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[NASA-CASE-GSC-10487-1] c03 N71-24719
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[NASA-CASE-LEW-11359] c03 N71-28579
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discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
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[NASA-CASE-MFS-20761-1] c03 N74-27519
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[NASA-CASE-MFS-23059-1] c44 N75-16078
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[NASA-CASE-MFS-22749-1] c44 N76-14601
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[NASA-CASE-NPO-11961-1] c44 N76-18643
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[NASA-CASE-PRC-10036] c09 N72-22200
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[NASA-CASE-GSC-10786-1] c10 N72-28241
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[NASA-CASE-ARC-10364-2(B)] c09 N74-14941
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041
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solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539
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alkali metals and cathode made from oxidizing
material
[NASA-CASE-LEW-11358] c03 N71-26084
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membrane and electrode assembly for fuel cells
or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
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cell battery, using semiconductor light
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[NASA-CASE-NPO-10194] c03 N71-20407
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[NASA-CASE-XNP-04758] c03 N71-24605
- ELECTRIC CHOPPERS**
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[NASA-CASE-GSC-10082-1] c10 N72-20221
- ELECTRIC COILS**
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spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
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Hollow spherical electrode for shielding
dielectric junction between high voltage
conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
Conductor for connecting parallel cells into
submodules in series to form solar cell matrix
[NASA-CASE-NPO-10821] c03 N71-19545
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conductive liquid confined within square loop
of deformable nonconductive tubing also used
for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
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between two flexible conductive discs for
monitoring physiological responses
[NASA-CASE-PRC-10029] c09 N71-24618
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semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447
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conductive liquid
[NASA-CASE-NPO-11377] c15 N73-27406
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[NASA-CASE-XLA-01288] c09 N69-21470
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components for electrical testing
[NASA-CASE-XNP-06032] c09 N69-21926
Releasable coupling device designed to receive
and retain matching ends of electrical
connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927
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[NASA-CASE-LEW-10689-1] c28 N71-26173
Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185
Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226
- ELECTRONIC EQUIPMENT**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-IXP-06531] c14 N71-17575
Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466
Development and characteristics of oscillating static inverter
[NASA-CASE-XGS-05289] c09 N71-19470
Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-IXP-02140] c09 N71-23097
Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-IXP-05524] c33 N71-24876
Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses

ELECTRONIC EQUIPMENT TESTS

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- [NASA-CASE-ERC-10032] c10 N71-25900
Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
- [NASA-CASE-XMS-06497] c14 N71-26244
Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
- [NASA-CASE-LAR-10204] c14 N71-27215
Device for rapid adjustment and maintenance of temperature in electronic components
- [NASA-CASE-XNP-02792] c14 N71-28958
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
- [NASA-CASE-NPO-10769] c08 N72-11171
Readily assembled universal environment housing for electronic equipment
- [NASA-CASE-KSC-10031] c15 N72-22486
Lead attachment for high temperature operation of electronic devices
- [NASA-CASE-ERC-10224] c09 N72-25261
Development of method and apparatus for detecting surface ions on silicon diodes and transistors
- [NASA-CASE-ERC-10325] c15 N72-25457
Development and characteristics of data decoder to process convolution encoded information
- [NASA-CASE-NPO-11371] c08 N73-12177
Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
- [NASA-CASE-GSC-10975-1] c08 N73-13187
Development and characteristics for automatically displaying digits in any desired order using optical techniques
- [NASA-CASE-XKS-00348] c09 N73-14215
Thermochromic compositions for detecting heat levels in electronic circuits and devices
- [NASA-CASE-NPO-10764-1] c14 N73-14428
Development of phase control coupling for use with phased array antenna
- [NASA-CASE-ERC-10285] c10 N73-16206
Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
- [NASA-CASE-KSC-10108] c14 N73-25461
Electronic strain level counter on in-flight aircraft
- [NASA-CASE-LAR-10756-1] c32 N73-26910
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- [NASA-CASE-NPO-11850-1] c09 N74-12912
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- [NASA-CASE-NPO-13479-1] c14 N74-32890
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- [NASA-CASE-XLA-06713] c14 N71-28991
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- [NASA-CASE-NPO-11948-1] c10 N74-32712
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- [NASA-CASE-XMS-02087] c09 N70-41717
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- [NASA-CASE-XNP-05821] c03 N71-11056
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- [NASA-CASE-MSC-12389] c33 N71-29052
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- [NASA-CASE-NPO-13157-1] c15 N74-32918
- ELECTRONIC PACKAGING**
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- [NASA-CASE-XMP-01483] c14 N69-27431
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- [NASA-CASE-LEW-10364-1] c09 N71-13522
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- [NASA-CASE-NPO-10051] c18 N71-24934
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- [NASA-CASE-XMS-02182] c10 N71-28783
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- [NASA-CASE-XGS-10010] c03 N72-15986
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- [NASA-CASE-GSC-10791-1] c15 N73-14469
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- [NASA-CASE-NFS-21919-1] c10 N73-25243
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- [NASA-CASE-MFS-21374-1] c10 N74-12951
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- [NASA-CASE-NPO-13157-1] c15 N74-32918
- ELECTRONIC RECORDING SYSTEMS**
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- [NASA-CASE-NPO-10185] c10 N71-26339
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- [NASA-CASE-XMP-02433] c14 N71-10616
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- [NASA-CASE-ARC-10132-1] c09 N71-24597
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- [NASA-CASE-GSC-10114-1] c10 N71-27366
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- [NASA-CASE-ARC-10364-2(B)] c09 N74-14941
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- [NASA-CASE-MFS-21395-1] c14 N74-26948
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- [NASA-CASE-MFS-21394-1] c12 N74-27744
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- [NASA-CASE-MFS-20044] c14 N71-28993
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- [NASA-CASE-FRC-10029] c09 N71-24618
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- [NASA-CASE-XLA-08966-1] c17 N71-25903
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- [NASA-CASE-MFS-13687] c09 N71-28691
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- [NASA-CASE-XAC-05506-1] c24 N71-16095
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- [NASA-CASE-MFS-22129-1] c33 N75-18477
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[NASA-CASE-XLE-00376] c28 N70-37245
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[NASA-CASE-GSC-10709-1] c28 N71-25213
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[NASA-CASE-GSC-11844-1] c33 N75-19522
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[NASA-CASE-MFS-14017] c14 N71-26627
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[NASA-CASE-XMP-02039] c15 N71-15871
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[NASA-CASE-NPO-13677-1] c35 N75-16791
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[NASA-CASE-MFS-20095] c24 N72-11595
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[NASA-CASE-MFS-22324-1] c27 N75-27160
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[NASA-CASE-GSC-11063-1] c03 N70-35584
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[NASA-CASE-GSC-10007] c18 N71-16046
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[NASA-CASE-XGS-05180] c18 N71-25881
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[NASA-CASE-ERC-10150] c14 N71-28992
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[NASA-CASE-NPO-11190] c03 N71-34044
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[NASA-CASE-XLA-01781] c14 N69-39975
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[NASA-CASE-ARC-10097-2] c07 N73-25160
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- Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201
- Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
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[NASA-CASE-LAR-10193-1] c15 N71-27146
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[NASA-CASE-XNP-01848] c15 N71-28959
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[NASA-CASE-NPO-10671] c15 N72-20443
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[NASA-CASE-MPS-20863] c31 N73-26876
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[NASA-CASE-XNP-00644] c03 N70-36803
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[NASA-CASE-XLE-01716] c09 N70-40234
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[NASA-CASE-GSC-11394-1] c09 N73-32109
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[NASA-CASE-NPO-13510-1] c44 N75-16972
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[NASA-CASE-XLE-00212] c03 N70-34134
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[NASA-CASE-XMS-00945] c09 N71-10798

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[NASA-CASE-XLA-00754] c15 N70-34850
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[NASA-CASE-NPO-13114-2] c44 N76-15573
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[NASA-CASE-LEW-12159-1] c44 N76-15603
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[NASA-CASE-LAR-10367-1] c03 N70-26817
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[NASA-CASE-XLE-00303] c15 N70-36535
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- Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
- Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GASEOUS ROCKET PROPELLANTS**
- Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMP-06926] c28 N71-22983
- GASES**
- Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- High speed scanner for measuring mass of preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
- Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
- Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- GASKETS**
- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
- Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MPS-21364-1] c15 N74-18126
- GATES (CIRCUITS)**
- Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432
- Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803
- GATES (OPENINGS)**
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under

- vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- GEARS**
Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692
Gearing system for eliminating backlash and
filtering input torque fluctuations from high
inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
Self lubricating gears and other mechanical
parts having surface adapted to frictional
contact
[NASA-CASE-MFS-14971] c15 N71-24984
Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c15 N74-27901
- GELLED ROCKET PROPELLANTS**
Method and apparatus for producing fine
particles in cryogenic liquid bath for gelled
rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- GELS**
Intermittent type silica gel adsorption
refrigerator for providing temperature control
for spacecraft components
[NASA-CASE-XNP-0C920] c15 N71-15906
- GENERATORS**
Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MFS-21424-1] c12 N74-27730
- GINBALS**
Gimballed partially submerged nozzle for solid
propellant rocket engines for providing
directional control
[NASA-CASE-IMP-01544] c28 N70-34162
Inertial gimbal alignment system for spacecraft
guidance
[NASA-CASE-XMP-01669] c21 N71-23289
Three stage motion restraining mechanism for
restraining and damping three dimensional
vibrational movement of gimballed package
during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
Hermetically sealed vibration damper design for
use in gimbal assembly of spacecraft, inertial
guidance system
[NASA-CASE-HSC-10959] c15 N71-26243
Low friction bearing and lock mechanism for
two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- GLANDS (SEALS)**
Development of mating flat surfaces to inhibit
leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
- GLASS**
Fabricating solar cells with dielectric layers
to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
Reduced gravity liquid configuration simulator
to study propellant behavior in rocket fuel
tanks
[NASA-CASE-XLE-02624] c12 N69-39988
Metal pattern bonding technique for cover glass
attachment to silicon solar cells for space
applications
[NASA-CASE-XLE-08569] c03 N71-23449
Apparatus for applying thin glass slides to
solar cells
[NASA-CASE-NPO-10575] c03 N72-25019
Glass-to-metal seals comprising relatively high
expansion metals
[NASA-CASE-LEW-10698-1] c15 N74-21063
Covered silicon solar cells and method of
manufacture --- with polymeric films
[NASA-CASE-LEW-11065-2] c44 N76-14600
Manufacture of glass-to-metal seals wherein the
cleanliness of the process is enhanced and the
leak resistance of the resulting seal is
maximized
[NASA-CASE-LAR-11563-1] c37 N76-21558
- GLASS COATINGS**
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cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
Helium outgassing process for fused glass
coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
Development of process for constructing
protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
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Liquid junction for glass electrode or pH meters:
[NASA-CASE-NPO-10682] c15 N70-34699
- GLASS FIBERS**
Nonmagnetic hermetically sealed battery case
made of epoxy resin and woven glass tape for
use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Lathe tool and holder combination for machining
resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
Development and characteristics of polyimide
impregnated laminates with fiberglass cloth
backing for application as printed circuit
boards
[NASA-CASE-MFS-20408] c18 N73-12604
Technique for bonding --- process for molding
silicone elastomer into fiberglass honeycomb
panel
[NASA-CASE-LAR-10073-1] c32 N74-23449
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structures
[NASA-CASE-LAR-10416-1] c18 N74-30001
Fiber modified polyurethane foam for ballistic
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[NASA-CASE-ARC-10714-1] c27 N76-15310
- GLIDE PATHS**
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[NASA-CASE-ARC-10456-1] c05 N75-12930
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Orbital and entry tracking accessory for globes
--- to provide range requirements for reentry
vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015
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Gas purged dry box glove reducing permeation of
air or moisture into dry box or isolator by
diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
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[NASA-CASE-LEW-11262-1] c18 N74-13270
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inherent light levels of ATP in luciferase
compositions
[NASA-CASE-XGS-05533] c04 N69-27487
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gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
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[NASA-CASE-XNP-09770] c15 N71-20440
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bonding of graphite to silver, glass,
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[NASA-CASE-XGS-00963] c15 N69-39735
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composite
[NASA-CASE-MFS-21077-1] c24 N75-28135
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[NASA-CASE-MFS-23229-1] c24 N76-19231
- GRATINGS (SPECTRA)**
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vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003
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by interferometric measurement of travel of
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[NASA-CASE-IMP-05844] c14 N71-17587
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- GRAVITATIONAL CONSTANT**
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[NASA-CASE-XMP-00424] c11 N70-38196
- GRAVITATIONAL EFFECTS**
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[NASA-CASE-ARC-10153] c05 N71-28619
Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- GRAVITATIONAL FIELDS**
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[NASA-CASE-XNP-08274] c10 N71-13537
- GRAVITY GRADIENT SATELLITES**
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[NASA-CASE-XAC-01591] c31 N71-17729
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[NASA-CASE-XLA-03132] c31 N71-22969
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[NASA-CASE-XMP-00424] c11 N70-38196
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[NASA-CASE-GSC-10555-1] c21 N71-27324
- GRIDS**
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[NASA-CASE-LEW-11694-1] c20 N75-18310
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[NASA-CASE-LEW-11694-2] c37 N76-14461
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[NASA-CASE-LEW-11876-1] c20 N76-21276
- GRINDING (MATERIAL REMOVAL)**
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[NASA-CASE-MFS-11279] c16 N71-20400
Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
- GRINDING MACHINES**
Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c15 N74-27905
- GROOVES**
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMP-10040] c15 N71-22877
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[NASA-CASE-LEW-10326-3] c15 N74-10474
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[NASA-CASE-XLE-10326-4] c15 N74-15125
- GROUND EFFECT MACHINES**
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Platform with several ground effect pads and plenum chambers
[NASA-CASE-MFS-14685] c31 N71-15689
Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
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[NASA-CASE-LAR-10256-1] c11 N74-34672
- GROUND HANDLING**
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383
- GROUND STATIONS**
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[NASA-CASE-GSC-10087-1] c02 N71-19287
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[NASA-CASE-NPO-11001] c07 N72-21118
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Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-IMS-05454-1] c07 N71-12391
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[NASA-CASE-IKS-03338] c15 N71-24043
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[NASA-CASE-IGS-04480] c16 N69-27491
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[NASA-CASE-INP-01501] c21 N70-41930
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Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- GUIDANCE SENSORS**
Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-IGS-00359] c14 N70-34158
Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-INP-09572] c14 N71-15621
Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
Sun direction detection system --- for use in controlling the attitude of a vehicle
[NASA-CASE-NPO-13722-1] c19 N75-33169
- GUN LAUNCHERS**
Self-obturator gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NPO-11013] c11 N72-22247
- GUNN EFFECT**
Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679
Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
- GUNS**
Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454
- GYRATORS**
Design of gyrotor circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517
Gyrotor circuit using MOS field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232
Integrated P-channel MOS gyrotor
[NASA-CASE-MFS-22343-1] c09 N74-34638
Integrable power gyrotor --- with Z-matrix design using parallel transistors
[NASA-CASE-MFS-22342-1] c33 N75-30428
- GYROSCOPES**
Externally pressurized air bearing for gyros

operating in high temperature, low gravity environments
 [NASA-CASE-XMP-00515] c15 N70-34664
 Air bearings for spacecraft gyros
 [NASA-CASE-XMP-00339] c15 N70-39896
 Development of spacecraft experiment pointing and attitude control system
 [NASA-CASE-XLA-05464] c21 N71-14132
 Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
 [NASA-CASE-ARC-10716-1] c31 N73-32784
 Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
 [NASA-CASE-NPO-13044-1] c14 N74-15094

GYROSTABILIZERS
 Passive dual spin misalignment compensators --- gyro-stabilized device
 [NASA-CASE-GSC-11479-1] c21 N74-28097
 Annular momentum control device used for stabilization of space vehicles and the like
 [NASA-CASE-LAR-11051-1] c15 N76-14158

H

HAFNIUM
 Thermal shock resistant hafnia ceramic materials
 [NASA-CASE-LAR-10894-1] c18 N73-14584

HALIDES
 Grinding mixtures of powdered metals and inert fillers for conversion to halide
 [NASA-CASE-LEW-10450-1] c15 N72-25448
 Zinc-halide battery with molten electrolyte
 [NASA-CASE-NPO-11961-1] c44 N76-18643

HALL EFFECT
 Current measurement by use of Hall effect generator
 [NASA-CASE-XAC-01662] c14 N71-23037
 Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
 [NASA-CASE-MFS-20385] c09 N71-24904
 Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
 [NASA-CASE-LAR-10620-1] c09 N72-25255
 Speed control system for dc motor equipped with brushless Hall effect device
 [NASA-CASE-MFS-20207-1] c09 N73-32107
 Hall effect magnetometer
 [NASA-CASE-LEW-11632-3] c14 N74-33944
 Hall effect magnetometer
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HALL GENERATORS
 Current measurement by use of Hall effect generator
 [NASA-CASE-XAC-01662] c14 N71-23037

HALOGENS
 Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
 [NASA-CASE-ARC-10098-1] c06 N71-24739

HAMMERS
 Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
 [NASA-CASE-MFS-20698] c15 N72-20446

HAND (ANATOMY)
 Mechanically operated hand which can depress trigger using touch control device
 [NASA-CASE-MFS-20413] c15 N72-21463
 Therapeutic hand exerciser
 [NASA-CASE-LAR-11667-1] c52 N76-19785

HANDLING EQUIPMENT
 Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
 [NASA-CASE-XMP-00580] c11 N70-35383
 Handling tool for printed circuit cards
 [NASA-CASE-MFS-20453] c15 N71-29133

HARDENING (MATERIALS)
 Method of heat treating age-hardenable alloys
 [NASA-CASE-XMP-01311] c26 N75-29236

HARMONIC GENERATORS
 Wideband generator for producing sine wave quadrature and second harmonic of input signal
 [NASA-CASE-NPO-11133] c10 N72-20223

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 Real time analysis of voiced sounds
 [NASA-CASE-NPO-13465-1] c71 N75-13593

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 Helmet and torso tiedown mechanism for shortening pressure suits upon inflation
 [NASA-CASE-XMS-00784] c05 N71-12335
 One hand backpack harness
 [NASA-CASE-LAR-10102-1] c05 N72-23085
 Shoulder harness and lap belt restraint system
 [NASA-CASE-ARC-10519-2] c05 N75-25915

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 [NASA-CASE-MSC-12086-1] c05 N71-12345

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 Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
 [NASA-CASE-MFS-20418] c14 N73-24473
 Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
 [NASA-CASE-ARC-10597-1] c05 N74-20726

HEART RATE
 Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
 [NASA-CASE-XMS-02399] c05 N71-22896
 Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
 [NASA-CASE-MFS-20418] c14 N73-24473
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 [NASA-CASE-MFS-20284-1] c05 N74-12778

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 [NASA-CASE-XLE-01903] c22 N71-23599

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 [NASA-CASE-XLE-00267] c28 N70-33356
 Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
 [NASA-CASE-XMS-09571] c05 N71-19439
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 [NASA-CASE-GSC-10188-1] c23 N71-24725
 Shell-side liquid metal boiler employing tube and shell heat exchanger
 [NASA-CASE-NPO-10831] c33 N72-20915
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 [NASA-CASE-NPO-10634] c23 N72-25619
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 [NASA-CASE-MFS-22991-1] c34 N75-10366
 Heat exchanger --- rocket combustion chambers and cooling systems
 [NASA-CASE-LEW-12252-1] c34 N75-19579
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 [NASA-CASE-LEW-12441-1] c34 N75-19580
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 [NASA-CASE-MSC-14143-1] c77 N75-20139
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 [NASA-CASE-XMS-05909-1] c14 N69-27459
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 [NASA-CASE-XPR-03802] c33 N71-23085
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[NASA-CASE-MPS-20333] c09 N71-13486
- Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MPS-20355] c33 N71-25353
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[NASA-CASE-LEW-11390-2] c24 N73-20763
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[NASA-CASE-LAR-10961-1] c15 N73-12496
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Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
- Multi-lobar scan horizon sensor
[NASA-CASE-IGS-00809] c21 N70-35427
- Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
- Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-IGS-01784] c10 N71-20782
- Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
- Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- HORIZONTAL SPACECRAFT LANDING**
Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
- HORIZONTAL TAIL SURFACES**
Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- HORN ANTENNAS**
Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-XNP-00611] c09 N70-35219
- Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-XNP-00540] c09 N70-35382
- Characteristics of antenna horn feeds consisting of central horn with overlapping peripheral horns
[NASA-CASE-GSC-10452] c07 N71-12396
- Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
- Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NPO-11264] c07 N72-25174
- Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330
- Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
- HOT CATHODES**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- HOT PRESSING**
Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- HOT WORKING**
Hot forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803
- HOT-WIRE ANEMOMETERS**
Metallic hot wire anemometer and method for fabricating the same
[NASA-CASE-ARC-10911-1] c35 N75-32426
- Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N76-13455
- HOT-WIRE FLOWMETERS**
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- HOUSINGS**
Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
- Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093

- Readily assembled universal environment housing for electronic equipment [NASA-CASE-KSC-10031] c15 N72-22486
- Gas flow control device, including housing and input port [NASA-CASE-NPO-11479] c15 N73-13462
- Cryogenic gyroscope housing --- with annular disks for gas spin-up [NASA-CASE-MFS-21136-1] c23 N74-18323
- Heat transfer device [NASA-CASE-NPO-11120-1] c33 N74-18552
- HOVERING**
- Hovering type flying vehicle design and principle mechanisms for manned or unmanned use [NASA-CASE-MSC-12111-1] c02 N71-11039
- HUGENIOT EQUATION OF STATE**
- Determining particle density using known material Hugoniot curves [NASA-CASE-LAR-11059-1] c76 N75-12810
- BULLS (STRUCTURES)**
- Efficient operation of improved hydrofoil design [NASA-CASE-ILA-00229] c12 N70-33305
- HUMAN BEINGS**
- Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions [NASA-CASE-ARC-10100-1] c05 N71-24738
- Automatic braking device for rapidly transferring humans or materials from elevated location [NASA-CASE-XKS-07814] c15 N71-27067
- An improved load handling device [NASA-CASE-MFS-23233-1] c54 N75-33725
- HUMAN BODY**
- Apparatus for measuring human body mass in zero or reduced gravity environment [NASA-CASE-XMS-03371] c05 N70-42000
- Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity [NASA-CASE-XPR-10856] c05 N71-11189
- Thermoregulating with cooling flow pipe network for humans [NASA-CASE-XMS-10269] c05 N71-24147
- Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices [NASA-CASE-MFS-21010-1] c05 N73-30078
- HUMAN FACTORS ENGINEERING**
- Shock absorbing couch for body support under high acceleration or deceleration forces [NASA-CASE-XMS-01240] c05 N70-35152
- Harness assembly adapted to support man on ground based apparatus which simulates weightlessness [NASA-CASE-MFS-14671] c05 N71-12341
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator [NASA-CASE-XAC-03777] c10 N71-15909
- Remote control device operated by movement of finger tips for manual control of spacecraft attitude [NASA-CASE-XAC-02405] c09 N71-16089
- Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities [NASA-CASE-MSC-12243-1] c05 N71-24728
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness [NASA-CASE-MSC-13282-1] c05 N71-24729
- Recording apparatus [NASA-CASE-LAR-11353-1] c14 N74-20020
- HUMAN PERFORMANCE**
- Color perception tester for testing color code perceptiveness of individuals [NASA-CASE-KSC-10278] c05 N72-16015
- HUMAN REACTIONS**
- Reaction tester for testing reaction to light stimuli [NASA-CASE-MSC-13604-1] c05 N73-13114
- HUMAN WASTES**
- Reduced gravity fecal collector seat and urinal [NASA-CASE-MFS-22102-1] c05 N74-20725
- Automatic biowaste sampling [NASA-CASE-MSC-14640-1] c54 N76-14804
- HYBRID COMPUTERS**
- Adaptive voting computer system [NASA-CASE-MSC-13932-1] c08 N74-14920
- HYBRID PROPELLANTS**
- Liner for hybrid solid propellants to bind propellant to rocket motor case [NASA-CASE-XNP-09744] c27 N71-16392
- HYDRAULIC CONTROL**
- Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type [NASA-CASE-MFS-10412] c12 N71-17578
- Throttle valve for regulating fluid flow volume [NASA-CASE-XNP-09698] c15 N71-18580
- Fluidic-thermochromic display device [NASA-CASE-ERC-10031] c12 N71-18603
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures [NASA-CASE-MFS-20830] c15 N71-30028
- HYDRAULIC EQUIPMENT**
- Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions [NASA-CASE-XNP-01772] c11 N70-41677
- Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions [NASA-CASE-XMF-03248] c11 N71-10604
- Hydraulic drive mechanism for leveling isolation platforms [NASA-CASE-XMS-03252] c15 N71-10658
- Antibacklash circuit for hydraulic drive system [NASA-CASE-XNP-01020] c03 N71-12260
- Hydraulic clamping of sheet stock specimens [NASA-CASE-ILA-05100] c15 N71-17696
- Design and development of double acting shock absorber for spacecraft docking operations [NASA-CASE-XMS-03722] c15 N71-21530
- Hydraulic apparatus for casting and molding of liquid polymers [NASA-CASE-XNP-07659] c06 N71-22975
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop [NASA-CASE-ARC-10131-1] c15 N71-27754
- Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation [NASA-CASE-XAC-00048] c02 N71-29128
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures [NASA-CASE-MFS-20830] c15 N71-30028
- Design and characteristics of mechanically extended and telescoping boom on crane assembly [NASA-CASE-NPO-11118] c03 N72-25021
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids [NASA-CASE-KSC-10615] c15 N73-12486
- Redundant hydraulic control system for actuators with three main valve combination [NASA-CASE-MFS-20944] c15 N73-13466
- Rocket propellant injector with porous faceplate for rocket engine combustion chamber [NASA-CASE-LEW-11071-1] c27 N73-27695
- Servo valve [NASA-CASE-LAR-11643-1] c37 N75-13268
- Combined pressure regulator and shutoff valve [NASA-CASE-NPO-13201-1] c37 N75-15050
- Ultrasonically bonded valve assembly [NASA-CASE-NPO-13360-1] c37 N75-25185
- Filter regeneration systems --- a system for regenerating a system filter in a fluid flow line [NASA-CASE-MSC-14273-1] c34 N75-33342
- Quick disconnect filter coupling [NASA-CASE-MFS-22323-1] c37 N76-14463
- HYDRAULIC FLUIDS**
- Miniature hydraulic actuator --- for control surfaces on airfoils [NASA-CASE-LAR-11522-1] c15 N74-34881
- HYDRAZINE DITROPOM**
- Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder [NASA-CASE-NPO-12015] c27 N73-16764

HYDRAZINES

- Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
- Hydrazine monoperfluoro alkanooate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
- Rubber composition for expulsion bladders and diaphragms for use with hydrazine
[NASA-CASE-NPO-11433] c18 N71-31140
- Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NPO-12122-1] c24 N76-14203

HYDROCARBON COMBUSTION

- Improved hydrogen-rich gas generator
[NASA-CASE-NPO-13464-2] c28 N76-16241

HYDROCARBON FUELS

- Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382

HYDROCARBONS

- Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446
- Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
[NASA-CASE-MSC-12669-1] c44 N76-16621

HYDROCHLORIC ACID

- Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742

HYDROFOILS

- Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305

HYDROFORMING

- Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346

HYDROGEN

- Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XNP-03873] c06 N69-39733
- Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
- Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-XNP-06531] c14 N71-17575
- Development of device for detecting hydrogen in ambient environments
[NASA-CASE-MFS-11537] c14 N71-20442
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c14 N72-25412
- Separation of dissolved hydrogen from water and coating with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140
- Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-HQN-10654-1] c16 N73-13489
- Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c36 N75-15029
- Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436
- Improved hydrogen-rich gas generator
[NASA-CASE-NPO-13464-2] c28 N76-16241
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446
- Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641
- Hydrogen-rich gas generator
[NASA-CASE-NPO-13464-1] c44 N76-18642

HYDROGEN EMBRITTELEMENT

- Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NPO-12122-1] c24 N76-14203

HYDROGEN FUELS

- Hydrogen-rich gas generator
[NASA-CASE-NPO-13560] c37 N76-18460

HYDROGEN OXYGEN FUEL CELLS

- Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
- Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044

HYDROGEN PEROXIDE

- Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504

HYDROGENATION

- Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127

HYDROSTATICS

- Hydrostatic bearing support
[NASA-CASE-LEW-11158-1] c37 N76-19440

HYDROXIDES

- Method for determining presence and type of OH in MgO
[NASA-CASE-NPO-10774] c06 N72-17095

HYGROSCOPICITY

- Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934

HYPERFINE STRUCTURE

- Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142

HYPERGOLIC ROCKET PROPELLANTS

- Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
- Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992
- Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634

HYPERSONIC AIRCRAFT

- Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XNP-02263] c02 N74-10907

HYPERSONIC FLOW

- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XLA-05378] c11 N71-21475

HYPERSONIC SPEED

- Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
- Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
- Variable dihedral shuttle orbiter --- for flight at hypersonic and subsonic speeds
[NASA-CASE-LAR-10706-1] c18 N75-16613

HYPERSONIC VEHICLES

- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin

- [NASA-CASE-XLA-01967] c31 N70-42015
HYPERVELOCITY GUNS
 Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
 [NASA-CASE-IGS-06628] c24 N71-16213
 Implosion driven, light gas, hypervelocity gun
 [NASA-CASE-XAC-05902] c11 N71-18578
 Collapsible piston for hypervelocity gun
 [NASA-CASE-MSC-13789-1] c11 N73-32152
HYPERVELOCITY IMPACT
 Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
 [NASA-CASE-NPO-12127-1] c14 N74-13130
 Semiconductor projectile impact detector
 [NASA-CASE-MFS-23008-1] c35 N76-19405
HYPERVELOCITY PROJECTILES
 Impact measuring technique for determining size of hypervelocity projectiles
 [NASA-CASE-LAR-10913] c14 N72-16282
 Multiple image storing system for obtaining holographic record on film of high speed projectile
 [NASA-CASE-MFS-20596] c14 N72-17324
HYPERVELOCITY WIND TUNNELS
 Hypersonic test facility for studying ablation in models under high pressure and high temperature
 [NASA-CASE-XLA-00378] c11 N71-15925
 Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
 [NASA-CASE-XLA-05378] c11 N71-21475
HYSTERESIS
 Belleville spring assembly with elastic guides having low hysteresis
 [NASA-CASE-XNP-09452] c15 N69-27504
IGNITERS
 Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
 [NASA-CASE-NPO-11559] c28 N73-24784
 Remote fire stack igniter --- with solenoid-controlled valve
 [NASA-CASE-MFS-21675-1] c33 N74-33378
IGNITION
 Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
 [NASA-CASE-XLA-00327] c25 N71-29184
IGNITION LIMITS
 High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
 [NASA-CASE-MSC-12178-1] c09 N71-13518
IGNITION SYSTEMS
 Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
 [NASA-CASE-XLE-00207] c28 N70-33375
 Ignition system for monopropellant combustion devices
 [NASA-CASE-XNP-00249] c28 N70-38249
 Igniter capsule for chemical ignition of liquid rocket propellants
 [NASA-CASE-XLE-00323] c28 N70-38505
 Catalyst bed ignition system for hydrazine propellants
 [NASA-CASE-XNP-00876] c28 N70-41311
 Sustained arc ignition system --- across a spark gap
 [NASA-CASE-LEW-12444-1] c33 N75-25056
IGNITION TEMPERATURE
 Test chamber for determining decomposition and autoignition of materials, used in spacecraft under controlled environmental conditions
 [NASA-CASE-KSC-10198] c11 N71-28629
ILLUMINATORS
 Camera adapter design for image magnification including lens and illuminator
 [NASA-CASE-XMF-03844-1] c14 N71-26474
 Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
 [NASA-CASE-HQN-10781] c23 N71-30292
IMAGE CONTRAST
 Video signal enhancement of signal component representing brightness of scene element in low contrast
 [NASA-CASE-NPO-10343] c07 N71-27341
 Method and apparatus for controlling the contrast of a photographic transparency
 [NASA-CASE-GSC-11989-1] c35 N76-16395
IMAGE CONVERTERS
 Real time liquid crystal image converter
 [NASA-CASE-LAR-11206-1] c23 N74-30118
 Resistive anode image converter
 [NASA-CASE-HQN-10876-1] c35 N75-19621
 Deep trap, laser activated image converting system
 [NASA-CASE-NPO-13131-1] c36 N75-19652
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 [NASA-CASE-BRC-10151] c16 N71-29131
 Automatic focus control for facsimile cameras
 [NASA-CASE-LAR-11213-1] c35 N75-15014
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 Apparatus for calibrating an image dissector tube
 [NASA-CASE-MFS-22208-1] c33 N75-26244
 Electronic optical transfer function analyzer
 [NASA-CASE-MFS-21672-1] c74 N76-19935
IMAGE ENHANCEMENT
 Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
 [NASA-CASE-ERC-10552] c09 N71-12539
 Physical correction filter for improving the optical quality of an image
 [NASA-CASE-HQN-10542-1] c74 N75-25706
IMAGE FILTERS
 Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
 [NASA-CASE-XLA-00062] c14 N70-33254
 Physical correction filter for improving the optical quality of an image
 [NASA-CASE-HQN-10542-1] c74 N75-25706
 Method and system for producing chroma signals
 [NASA-CASE-MSC-14683-1] c74 N75-33835
IMAGE TUBES
 Image tube --- deriving electron beam replica of image
 [NASA-CASE-GSC-11602-1] c09 N74-21850
 Method and system for producing chroma signals
 [NASA-CASE-MSC-14683-1] c74 N75-33835
IMAGES
 Camera adapter design for image magnification including lens and illuminator
 [NASA-CASE-XMF-03844-1] c14 N71-26474
 Stereoscopic television system, including projecting pair of binocular images
 [NASA-CASE-ARC-10160-1] c23 N72-27728
IMAGING TECHNIQUES
 Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
 [NASA-CASE-ERC-10001] c23 N71-24868
 Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
 [NASA-CASE-GSC-11133-1] c23 N72-11568
 Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
 [NASA-CASE-MFS-20809] c23 N73-13660
 Computerized optical system for producing multiple images of a scene simultaneously
 [NASA-CASE-MSC-12404-1] c23 N73-13661
 Optical imaging system for increasing light absorption efficiency of imaging detector
 [NASA-CASE-ARC-10194-1] c23 N73-20741
 Device for displaying and recording angled views of samples to be viewed by microscope
 [NASA-CASE-GSC-11690-1] c14 N73-28499
 Ritchey-Chretien telescope responsive to images located off telescope optical axis
 [NASA-CASE-GSC-11487-1] c14 N73-30393
 Data storage, image tube type
 [NASA-CASE-MSC-14053-1] c08 N74-12888
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 [NASA-CASE-MSC-14096-1] c14 N74-15095
 Field sequential stereo television
 [NASA-CASE-MSC-12616-1] c07 N74-32601

SUBJECT INDEX

INERTIAL GUIDANCE

- Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N75-26206
- IMIDES**
Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c15 N74-13177
- IMINES**
Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMP-08651] c06 N71-11236
Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMP-08655] c06 N71-11239
Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMP-08652] c06 N71-11243
Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
- IMMOBILIZATION**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMP-06589] c05 N71-23159
Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
- IMPACT**
Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
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[NASA-CASE-GSC-11829-1] c35 N75-27331
- IMPACT ACCELERATION**
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- IMPACT DAMAGE**
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[NASA-CASE-XLA-00941] c14 N71-23240
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Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- IMPACT RESISTANCE**
Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
- IMPACT STRENGTH**
High impact pressure regulator having minimum number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625
- IMPACT TESTING MACHINES**
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
- IMPACT TOLERANCES**
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
- IMPEDANCE MATCHING**
Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334
Reflectometer for receiver input impedance match measurement
[NASA-CASE-XNP-10843] c07 N71-11267
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
- Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
- IMPEDANCE MEASUREMENTS**
Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- IMPLANTATION**
Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- IMPLOSIONS**
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578
- IMPURITIES**
Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMP-01016] c26 N71-17818
- INCIDENT RADIATION**
Scattering independent determination of absorption and emission coefficients and radiative equilibrium state
[NASA-CASE-NPO-13677-1] c35 N75-16791
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627
- INCLINATION**
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475
- INCOHERENT SCATTERING**
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c09 N74-20859
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Controlled caging and uncaging mechanism for remote instrument control
[NASA-CASE-GSC-11063-1] c03 N70-35584
Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-MPS-13686] c15 N71-18132
Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MPS-13130] c10 N72-17173
- INDUCTANCE**
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LW-10330-1] c09 N72-27226
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Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
- INDUCTION MOTORS**
Voltage controlled oscillator circuit for two-phase induction motor control
[NASA-CASE-MPS-21465-1] c10 N73-32145
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MPS-22088-1] c33 N75-15874
- INDUCTORS**
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XMP-01667] c15 N71-17647
Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
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Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MPS-20698-2] c15 N73-19457
- INERTIA**
Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- INERTIAL GUIDANCE**
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system

- [NASA-CASE-MSC-10959] c15 N71-26243
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- Inertial gimbale alignment system for spacecraft guidance [NASA-CASE-XMF-01669] c21 N71-23289
- Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position [NASA-CASE-NPO-13044-1] c14 N74-15094
- An attitude control system [NASA-CASE-MPS-22787-1] c21 N74-35096
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- Development of attitude control system for spacecraft orientation [NASA-CASE-XGS-04393] c21 N71-14159
- Large amplitude, linear inertial reference system of vibrating string type for spacecraft reference plane [NASA-CASE-YAC-03107] c23 N71-16098
- INFLATABLE SPACECRAFT**
- Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces [NASA-CASE-XLA-01291] c33 N70-36617
- Erectable, inflatable, radio signal reflecting passive communication satellite [NASA-CASE-XLA-00210] c30 N70-40309
- Rotating, multisided mandrel for fabricating gored inflatable spacecraft [NASA-CASE-XLA-04143] c15 N71-17687
- Forming inflatable panels erectable in space for passive communication satellite [NASA-CASE-XLA-03497] c15 N71-23052
- Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions [NASA-CASE-XMS-06162] c31 N71-28851
- INFLATABLE STRUCTURES**
- Aeroflexible wing structure with air scoop for inflating stiffeners with ram air [NASA-CASE-XLA-06095] c01 N69-39981
- Design of inflatable life raft for aircrafts and boats [NASA-CASE-XMS-00863] c05 N70-34857
- Lightweight life preserver without fastening devices [NASA-CASE-XMS-00864] c05 N70-36493
- Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction [NASA-CASE-XLA-00204] c32 N70-36536
- Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time [NASA-CASE-XMS-00893] c07 N70-40063
- Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles [NASA-CASE-XLA-01926] c14 N71-15620
- Inflation system for balloon type satellites [NASA-CASE-XGS-03351] c31 N71-16081
- Development and characteristics of protective coatings for spacecraft [NASA-CASE-XNP-02507] c31 N71-17679
- Development and characteristics of self supporting space vehicle [NASA-CASE-XLA-00117] c31 N71-17680
- Conforming polisher for aspheric surfaces of revolution with inflatable tube [NASA-CASE-XGS-02884] c15 N71-22705
- Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft [NASA-CASE-XLA-03492] c15 N71-22713
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube [NASA-CASE-MPS-20068] c07 N71-27191
- Space expandable tether device for use as passageway between two docked spacecraft [NASA-CASE-XMS-10993] c15 N71-28936
- Inflatable rocket engine nozzle skirt with transpiration cooling [NASA-CASE-MPS-20619] c28 N72-11708
- Modification of one man life raft [NASA-CASE-LAR-10241-1] c05 N74-14845
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- Multiple pattern holographic information storage and readout system [NASA-CASE-ERC-10151] c16 N71-29131
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- Temperature sensitive capacitor device for detecting very low intensity infrared radiation [NASA-CASE-XNP-09750] c14 N69-39937
- Sight switch using infrared source and sensor mounted beside eye [NASA-CASE-XMF-03934] c09 N71-22985
- Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam [NASA-CASE-LAR-10728-1] c14 N73-12445
- Doped Josephson tunneling junction for use in a sensitive IR detector [NASA-CASE-NPO-13348-1] c33 N75-31332
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- INFRARED LASERS**
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver [NASA-CASE-NPO-11919-1] c14 N74-11284
- INFRARED RADIATION**
- High speed infrared furnace [NASA-CASE-XLE-10466] c17 N69-25147
- High field CdS detector for infrared radiation [NASA-CASE-LAR-11027-1] c14 N74-18088
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- Method and equipment for locating earth infrared horizon from space, independent of season and latitude [NASA-CASE-LAR-10726-1] c14 N73-20475
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- Diatomic infrared gasdynamic laser --- for producing different wavelengths [NASA-CASE-ARC-10370-1] c36 N75-31426
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- Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities [NASA-CASE-XLA-03273] c14 N71-18699
- INFRARED SPECTROSCOPY**
- Polymer coatings for moisture protection of optical windows in infrared spectroscopy [NASA-CASE-ARC-10749-1] c23 N73-32542
- INFRASONIC FREQUENCIES**
- Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir [NASA-CASE-MSC-11847-1] c14 N72-11363
- INGESTION (BIOLOGY)**
- Ingestible miniaturized telemetry device for deep body temperature measurements on humans and animals [NASA-CASE-ARC-10583-1] c05 N73-14093
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- Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge [NASA-CASE-LAR-10372] c09 N71-18599
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- Foam insulation thickness measuring and injection device for spacecraft applications [NASA-CASE-MPS-20261] c14 N71-27005
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- Fuel injection system for maximum combustion efficiency of rocket engines [NASA-CASE-XLE-00111] c28 N70-38199
- Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant [NASA-CASE-XMF-00148] c28 N70-38710
- Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube [NASA-CASE-XGS-06628] c24 N71-16213

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- Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber [NASA-CASE-XLE-03157] c28 N71-24736
- Bipropellant injector with pair of concave deflector plates [NASA-CASE-XNP-09461] c28 N72-23809
- Coaxial injector for mixing liquid propellants within combustion chambers [NASA-CASE-NPO-11095] c15 N72-25455
- Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid [NASA-CASE-NPO-11377] c15 N73-27406
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- Method for maintaining good performance in gas turbine during air flow distortion [NASA-CASE-LEW-10286-1] c28 N71-28915
- Airflow control system for supersonic inlets [NASA-CASE-LEW-11188-1] c02 N74-20646
- Variably positioned guide vanes for aerodynamic choking [NASA-CASE-LAR-10642-1] c28 N74-31270
- Method for fabricating a mass spectrometer inlet leak [NASA-CASE-GSC-12077-1] c35 N76-13465
- Shock position sensor for supersonic inlets --- measuring pressure in the throat of a supersonic inlet [NASA-CASE-LEW-11915-1] c35 N76-14431
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- Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure [NASA-CASE-XLE-03512] c12 N69-21466
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- INOCULATION**
- Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor [NASA-CASE-LAR-11074-1] c51 N75-13502
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- Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents [NASA-CASE-GSC-11214-1] c06 N73-13128
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- Inorganic ion exchange membrane electrolytes for fuel cell use [NASA-CASE-XNP-04264] c03 N69-21337
- Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments [NASA-CASE-XMP-03988] c15 N71-21403
- Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control [NASA-CASE-ARC-10098-1] c06 N71-24739
- Inorganic thermal control and solar reflector coatings [NASA-CASE-MPS-20011] c18 N72-22566
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- RC networks with voltage amplifier, RC input circuit, and positive feedback [NASA-CASE-ARC-10020] c10 N72-17172
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- Solar radiation direction detector and device for compensating degradation of photocells [NASA-CASE-XLA-00183] c14 N70-40239
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- Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers [NASA-CASE-XNP-04180] c07 N69-39736
- Inertial gimbal alignment system for spacecraft guidance [NASA-CASE-XMP-01669] c21 N71-23289
- Optical gauging system for monitoring machine tool alignment [NASA-CASE-XAC-09489-1] c15 N71-26673
- Development of solar energy powered heliotope assembly to orient solar array toward sun [NASA-CASE-GSC-10945-1] c21 N72-31637
- INSTRUMENT PACKAGES**
- Apparatus for ejecting covers of instrument packages using differential pressure principle [NASA-CASE-XMP-04132] c15 N69-27502
- Removable potting compound for instrument shock protection [NASA-CASE-XLA-00482] c15 N70-36409
- Plastic foam generator for space vehicle instrument payload package flotation in water landing [NASA-CASE-XLA-00838] c03 N70-36778
- High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads [NASA-CASE-XLA-01339] c31 N71-15692
- Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants [NASA-CASE-XNP-09763] c14 N71-20461
- INSTRUMENTS**
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- Design and development of pressure sensor for measuring differential pressures of few pounds per square inch [NASA-CASE-XMP-01974] c14 N71-22752
- Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature [NASA-CASE-XGS-02319] c14 N71-22965
- Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies [NASA-CASE-XLA-00781] c09 N71-22999
- Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow [NASA-CASE-LEW-10281-1] c14 N72-17327
- Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft [NASA-CASE-MSC-12372-1] c31 N72-25842
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- Low thermal loss piping arrangement for moving cryogenic media through double chamber structure [NASA-CASE-XNP-08882] c15 N69-39935
- INSULATION**
- Electrode attached to helmets for detecting low level signals from skin of living creatures [NASA-CASE-ARC-10043-1] c05 N71-11193
- Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication [NASA-CASE-XGS-02435] c18 N71-22998
- Method of fabricating equal length insulated wire [NASA-CASE-FRC-10038] c15 N72-20444
- Inductance device with vacuum insulation and materials of low gas entrapping capability [NASA-CASE-LEW-10330-1] c09 N72-27226
- Ceramic coating for silica insulation [NASA-CASE-MSC-14270-2] c18 N74-30004
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INSULATORS

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INSULATORS

High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574

High temperature resistant cermet and ceramic compositions --- for use in thermionic converters or diodes
[NASA-CASE-NPO-13690-1] c27 N76-13294

INTAKE SYSTEMS

Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

Jet engine air intake system
[NASA-CASE-ARC-10761-1] c07 N75-31108

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Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897

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[NASA-CASE-XMF-08804] c09 N71-24717

Method and apparatus for testing integrated circuit microtab welds
[NASA-CASE-ARC-10176-1] c15 N72-21464

Single integrated circuit chip with field effect transistor
[NASA-CASE-GSC-10835-1] c09 N72-33205

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[NASA-CASE-MSC-13907-1] c10 N73-26230

Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112

Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MPS-21374-1] c10 N74-12951

Integrated P-channel MOS gyrator
[NASA-CASE-MPS-22343-1] c09 N74-34638

Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957

Integrable power gyrator --- with Z-matrix design using parallel transistors
[NASA-CASE-MPS-22342-1] c33 N75-30428

INTEGRATORS

Solid state operational integrator
[NASA-CASE-NPO-10230] c09 N71-12520

Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084

Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315

Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669

High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

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Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627

Incremental motion drive system applied to interferometer components
[NASA-CASE-XNP-08897] c15 N71-17694

Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170

Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215

Two beam interferometer-polarimeter
[NASA-CASE-NPO-11239] c14 N73-12446

Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463

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[NASA-CASE-NPO-13569-1] c35 N75-21600

High resolution Fourier interferometer-spectropolarimeter
[NASA-CASE-NPO-13604-1] c35 N75-22688

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Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321

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[NASA-CASE-LEW-11726-1] c26 N73-26752

Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MPS-20861-1] c18 N73-32437

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Variable displacement fuel pump for internal combustion engines
[NASA-CASE-MSC-12139-1] c28 N71-14058

Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMF-06926] c28 N71-22983

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[NASA-CASE-NPO-12072] c28 N72-22772

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[NASA-CASE-LEW-12245-1] c26 N75-26087

System for minimizing internal combustion engine pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457

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Compact heat shielding for interplanetary space vehicles
[NASA-CASE-XMS-00486] c33 N70-33344

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[NASA-CASE-XAC-05462-2] c10 N72-17171

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[NASA-CASE-XMS-02677] c31 N70-42075

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Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394

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Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012

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[NASA-CASE-MPS-23099-1] c09 N75-32134

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Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c14 N74-18090

Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MPS-22088-1] c33 N75-15874

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Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984

Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254

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[NASA-CASE-NPO-10373] c03 N71-18698

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[NASA-CASE-XNP-01960] c09 N71-23027

Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N75-25594

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Apparatus for producing high purity I-123 from Xe-123 by bombarding tellurium target with cyclotron beam
[NASA-CASE-LEW-10518-2] c24 N72-28714

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[NASA-CASE-LEW-10518-1] c24 N72-33681

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[NASA-CASE-LEW-11390-2] c24 N73-20763
- Heat-pipe production of high purity radioiodine for thyroid measurements
[NASA-CASE-LEW-11390-3] c11 N73-28128
- Apparatus for producing high purity I-123 --- for thyroid measurement
[NASA-CASE-LEW-10518-3] c15 N74-10476
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- Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
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- Dispensing targets for ion beam particle generators
[NASA-CASE-NPO-13112-1] c11 N74-26767
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[NASA-CASE-LEW-11646-1] c28 N74-31269
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[NASA-CASE-LEW-11876-1] c20 N76-21276
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- Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
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- Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c18 N74-13270
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[NASA-CASE-XNP-02592] c24 N71-20518
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- Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
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[NASA-CASE-NPO-13443-1] c76 N76-20994
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- Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278
- Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
- Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
- Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980
- Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
- Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
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[NASA-CASE-XNP-02839] c28 N70-41922
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[NASA-CASE-XLE-01124] c28 N71-14043
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[NASA-CASE-XLE-02066] c28 N71-15661
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[NASA-CASE-XNP-02592] c24 N71-20518
- Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
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[NASA-CASE-XLE-04501] c09 N71-23190
- Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293
- Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
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[NASA-CASE-XNP-00416] c15 N70-36947
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[NASA-CASE-XMF-01452] c15 N70-41371
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[NASA-CASE-XMS-09636] c05 N71-12344
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[NASA-CASE-XNP-01855] c15 N71-28937
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[NASA-CASE-XNP-02278] c15 N71-28951
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[NASA-CASE-LEW-11387-1] c15 N74-18128
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[NASA-CASE-NPO-10070] c15 N71-27372

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[NASA-CASE-MS-12293-1] c14 N72-27411
- Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
- Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
- Attitude sensor
[NASA-CASE-LAR-10586-1] c14 N74-15089
- Very high intensity light source using a cathode ray tube --- electron beams
[NASA-CASE-XNP-01296] c33 N75-27250
- Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318
- LIGHT TRANSMISSION**
- Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MPS-20074] c16 N71-15565

LIGHTING EQUIPMENT

SUBJECT INDEX

Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365

Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-IKS-03509] c14 N71-23175

Solar cell panel with light transmitting cover plate
[NASA-CASE-NPO-10747] c03 N72-22042

Method and system for transmitting and distributing optical frequency radiation
[NASA-CASE-HQN-1054-3] c23 N72-23695

Thin absorbing metallic film for increased visible light transmission
[NASA-CASE-LAR-10836-1] c26 N72-27784

Transmitting and reflecting diffuser --- for ultraviolet light
[NASA-CASE-LAR-10385-2] c23 N74-13436

LIGHTING EQUIPMENT

Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-IKS-05932] c09 N71-26787

Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

LIGHTNING

Apparatus for determining distance to lightning strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175

System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110

Monitoring and recording lightning strokes in predetermined area
[NASA-CASE-KSC-10728-1] c14 N73-32319

Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246

LIMITER CIRCUITS

Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084

Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NPO-10169] c10 N71-24844

Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

Low level signal limiter
[NASA-CASE-XLE-04791] c14 N74-22096

LINEAR ACCELERATORS

Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962

LINEAR RECEIVERS

Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233

LINEAR SYSTEMS

Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503

Family of n-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254

Linear phase demodulator
[NASA-CASE-GSC-12018-1] c17 N76-13169

LINEARITY

Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982

Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045

LINKAGES

Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MPS-11497] c28 N71-16224

Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MPS-20760] c14 N72-33377

LIQUEFACTION

Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

LIQUID BEARINGS

Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359

LIQUID COOLING

Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-IKS-03700] c15 N69-24266

External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372

Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929

Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631

Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-IKS-09571] c05 N71-19439

Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MPS-14114-2] c09 N71-24807

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MPS-14114] c33 N71-27862

Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152

Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15098

Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071

Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317

Liquid-cooled brassiere
[NASA-CASE-ARC-11007-1] c52 N76-18782

Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c37 N76-20486

LIQUID CRYSTALS

Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410

Input signal measurement using liquid crystalline elements
[NASA-CASE-ERC-10275] c26 N72-25680

Real time liquid crystal image converter
[NASA-CASE-LAR-11206-1] c23 N74-30118

LIQUID FILLED SHELLS

Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910

Design and development of fluid sample collector
[NASA-CASE-IKS-06767-1] c14 N71-20435

Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835

Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265

LIQUID FLOW

Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988

Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699

Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409

Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492

Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XMP-02822] c14 N70-41994

High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074

Carrier liquid system containing bodies of ablative material
[NASA-CASE-LEW-10359-2] c33 N73-25952

Zero gravity liquid transfer device, using spiral shaped screen
[NASA-CASE-KSC-10626] c14 N73-27378

- System for measuring Reynolds stress in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N75-16770
- LIQUID HELIUM**
Heat operated cryogenic electrical generator
[NASA-CASE-NPO-13303-1] c20 N75-24837
Helium refrigerator
[NASA-CASE-NPO-13435-1] c31 N76-14284
- LIQUID HYDROGEN**
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMP-05046] c33 N71-28892
Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c15 N74-18126
- LIQUID INJECTION**
Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-XMP-00968] c28 N71-15660
- LIQUID LASERS**
Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343
- LIQUID LEVELS**
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500
- LIQUID METALS**
Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803
Analytical test apparatus and method for determining oxygen content in alkali liquid metal
[NASA-CASE-XLE-01997] c06 N71-23527
Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915
U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129
Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c14 N74-21018
- LIQUID NITROGEN**
Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484
- LIQUID OXYGEN**
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMP-02221] c18 N71-27170
- LIQUID PHASES**
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199
Low gravity phase separator
[NASA-CASE-MSC-14773-1] c31 N75-32262
- LIQUID PROPELLANT ROCKET ENGINES**
High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284
Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XMP-00185] c21 N70-34539
Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XMP-00148] c28 N70-38710
Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275
Rocket propellant injector with porous faceplate for rocket engine combustion chamber
[NASA-CASE-LEW-11071-1] c27 N73-27695
Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c28 N74-13502
Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329
- LIQUID ROCKET PROPELLANTS**
Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241
Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910
Igniter capsule for chemical ignition of liquid rocket propellants
[NASA-CASE-XLE-00323] c28 N70-38505
High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447
Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMP-01899] c31 N70-41948
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654
Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024
Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134
- LIQUID SLOSHING**
Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-XMP-00658] c12 N70-38997
Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103
Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring

- [NASA-CASE-XLA-05541] c12 N71-26387
- LIQUID-GAS MIXTURES**
- Liquid-gas separator adapted for use in zero gravity environment - drawings [NASA-CASE-XMS-01624] c15 N70-40062
- Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions [NASA-CASE-XMS-01492] c05 N70-41297
- Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases [NASA-CASE-XLE-01449] c15 N70-41646
- Liquid-gaseous centrifugal separator for weightlessness environment [NASA-CASE-XLA-00415] c15 N71-16079
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer [NASA-CASE-XMP-04042] c15 N71-23023
- LIQUID-VAPOR INTERFACES**
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank [NASA-CASE-XLE-00586] c15 N71-15968
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor [NASA-CASE-XNP-02862-1] c15 N71-26294
- Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant [NASA-CASE-MPS-11204] c14 N71-29134
- LIQUIDS**
- Liquid-gas separator adapted for use in zero gravity environment - drawings [NASA-CASE-XMS-01624] c15 N70-40062
- Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling [NASA-CASE-NPO-10037] c09 N71-19610
- Purification apparatus for vaporization and fractional distillation of liquids [NASA-CASE-XNP-08124] c15 N71-27184
- Quantitative liquid measurements in container by resonant frequencies [NASA-CASE-XNP-02500] c18 N71-27397
- Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir [NASA-CASE-MSC-11847-1] c14 N72-11363
- Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface [NASA-CASE-LEW-10359] c33 N72-25911
- Pressurized tank for feeding liquid waste into processing equipment [NASA-CASE-LAR-10365-1] c05 N72-27102
- Apparatus for mixing two or more liquids under zero gravity conditions [NASA-CASE-LAR-10195-1] c15 N73-19458
- Bi-metallic fluid displacement apparatus --- for stirring and heating stored gases and liquids [NASA-CASE-ARC-10441-1] c15 N74-15126
- Method and device for detection of surface discontinuities or defects [NASA-CASE-MSC-14187-1] c14 N74-32879
- Automatic liquid inventory collecting and dispensing unit [NASA-CASE-LAR-11071-1] c35 N75-19611
- A 2 degree/90 degree laboratory scattering photometer [NASA-CASE-GSC-12088-1] c35 N76-17369
- LITHIUM COMPOUNDS**
- Utilization of lithium p-lithiphenoxide to prepare star polymers [NASA-CASE-NPO-10998-1] c06 N73-32029
- LOAD DISTRIBUTION (FORCES)**
- Force measuring instrument for structural members, particularly fastening bolts or studs [NASA-CASE-XMP-00456] c14 N70-34705
- Multiple Belleville spring assembly with even load distribution [NASA-CASE-XNP-00840] c15 N70-38225
- Device for use in loading tension members --- characterized by elongated elastic body [NASA-CASE-MPS-21488-1] c14 N75-24794
- Pneumatic load compensating or controlling system [NASA-CASE-ARC-10907-1] c37 N75-32465
- LOAD TESTING MACHINES**
- Load cell protection device using spring-loaded breakaway mechanism [NASA-CASE-XMS-06782] c32 N71-15974
- Development of device for transferring load from load cell to bypass mechanism [NASA-CASE-XMS-06329-1] c15 N71-20441
- Method and apparatus for tensile testing of metal foil [NASA-CASE-LAR-10208-1] c35 N76-18400
- LOAD TESTS**
- Differential pressure cell insensitive to changes in ambient temperature and extreme overload [NASA-CASE-XAC-00042] c14 N70-34816
- LOADING OPERATIONS**
- Air bearings for near frictionless transfer of loads from one body to another [NASA-CASE-XMP-01887] c15 N71-10617
- An improved load handling device [NASA-CASE-MPS-23233-1] c54 N75-33725
- Load regulating latch [NASA-CASE-MSC-19535-1] c37 N76-15463
- LOADS (FORCES)**
- Device for handling heavy loads by distributing forces [NASA-CASE-XNP-04969] c11 N69-27466
- Two plane balance for simultaneous measurements of multiple forces [NASA-CASE-IAC-00073] c14 N70-34813
- Improving load capacity and fatigue life of rolling element systems in rockets and missiles [NASA-CASE-XLE-02999] c15 N71-16052
- Development of device for transferring load from load cell to bypass mechanism [NASA-CASE-XMS-06329-1] c15 N71-20441
- Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads [NASA-CASE-XMS-05890] c09 N71-23191
- Solid state force measuring electromechanical transducers made of piezoresistive materials [NASA-CASE-ERC-10088] c26 N71-25490
- Turn on current transient limiter for controlling peak current flow in high capacity load [NASA-CASE-GSC-10413] c10 N71-26531
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator [NASA-CASE-GSC-10065-1] c10 N71-27136
- Force balanced throttle valve for fuel control in rocket engines [NASA-CASE-NPO-10808] c15 N71-27432
- Energy absorption device in high precision gear train for protection against damage to components caused by stop loads [NASA-CASE-XNP-01848] c15 N71-28959
- Air bearing for use in exterior environment for moving heavy loads [NASA-CASE-WLP-10002] c15 N72-17451
- Measuring device for bearing preload using spring washers [NASA-CASE-MPS-20434] c11 N72-25288
- Variable direction force coupler for transmitting force along selectable curve path [NASA-CASE-MPS-20317] c15 N73-13463
- Versatile ergometer with work load control [NASA-CASE-MPS-21109-1] c05 N73-27941
- Three-axis adjustable loading structure [NASA-CASE-FRC-10051-1] c14 N74-13129
- G-load measuring and indicator apparatus --- for aircraft [NASA-CASE-ARC-10806] c14 N74-27872
- LOCATES SYSTEM**
- System for locating lightning strokes by coordination of directional antenna signals [NASA-CASE-KSC-10729-1] c09 N73-32110
- Aircraft mounted crash activated transmitter device [NASA-CASE-MPS-16609-3] c09 N74-34647
- Position determination systems --- using orbital antenna scan of celestial bodies [NASA-CASE-MSC-12593-1] c17 N76-21250
- LOCKING**
- Releasable coupling device designed to receive and retain matching ends of electrical connectors [NASA-CASE-XMS-07846-1] c09 N69-21927

LOCKS (FASTENERS)

Ball locking device which releases in response to small forces when subjected to high axial loads
 [NASA-CASE-XMP-01371] c15 N70-41829
 Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
 [NASA-CASE-GSC-10556-1] c31 N71-26537
 Locking device for retaining turbine rotor blades on turbine wheel
 [NASA-CASE-XMP-00816] c28 N71-28928
 Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
 [NASA-CASE-LAR-10686] c14 N71-28935
 Design of quick release locking pin for joining two or more load-carrying structural members
 [NASA-CASE-MPS-18495] c15 N72-11385

LOCOMOTION

Jet shoes for space locomotion
 [NASA-CASE-XLA-08491] c05 N69-21380
 Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
 [NASA-CASE-XMS-02977] c11 N71-10746
 Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
 [NASA-CASE-MSC-12397-1] c05 N72-25119

LOGARITHMS

Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
 [NASA-CASE-ERC-10267] c09 N72-23173

LOGIC CIRCUITS

Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
 [NASA-CASE-ERC-10072] c09 N70-11148
 Counter-divider circuit for accuracy and reliability in binary circuits
 [NASA-CASE-XMP-00421] c09 N70-34502
 Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
 [NASA-CASE-XNP-00432] c08 N70-35423
 Conversion system for increasing resolution of analog to digital converters
 [NASA-CASE-IAC-00404] c08 N70-40125
 Data processor having multiple sections activated at different times by selective power coupling to sections
 [NASA-CASE-XGS-04767] c08 N71-12494
 Binary sequence detector with few memory elements and minimized logic circuit complexity
 [NASA-CASE-XNP-05415] c08 N71-12505
 Bistable multivibrator circuits operating at high speed and low power dissipation
 [NASA-CASE-XGS-00823] c10 N71-15910
 Logic AND gate for fluid circuits
 [NASA-CASE-XLA-07391] c12 N71-17579
 Logic circuit to ripple add and subtract binary counters for spaceborne computers
 [NASA-CASE-IGS-04766] c08 N71-18602
 Constructing Exclusive-Or digital logic circuit in single module
 [NASA-CASE-XLA-07732] c08 N71-18751
 Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
 [NASA-CASE-GSC-10366-1] c10 N71-18772
 Serial digital decoder design with square circuit matrix and serial memory storage units
 [NASA-CASE-NPO-10150] c08 N71-24650
 Binary to decimal decoder logic circuit design with feedback control and display device
 [NASA-CASE-IXS-06167] c08 N71-24890
 Design and development of multistage current steering switch with inductively coupled magnetic cores
 [NASA-CASE-XNP-08567] c09 N71-26000
 Logic circuit for generating multibit binary code word in parallel
 [NASA-CASE-XNP-04623] c10 N71-26103
 Adaptive signal generating system and logic circuits for satellite television systems
 [NASA-CASE-GSC-11367] c10 N71-26374

Transistorized switching logic circuits with tunnel diodes
 [NASA-CASE-GSC-10878-1] c10 N72-22236
 Logical function and circuit generator
 [NASA-CASE-XLA-05099] c09 N73-13209
 A synchronous binary array divider
 [NASA-CASE-ERC-10180-1] c08 N74-20836
 Computer interface system --- using asynchronous clocks
 [NASA-CASE-NPO-13428-1] c08 N74-30549
 Four phase logic systems --- including integrated microcircuits
 [NASA-CASE-MSC-14240-1] c33 N75-14957

LONGITUDINAL CONTROL

Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
 [NASA-CASE-XAC-01404] c05 N70-41581

LOOP ANTENNAS

Collapsible, space erectable loop antenna system for space vehicle
 [NASA-CASE-XMP-00437] c07 N70-40202
 Automatic carrier acquisition system for phase locked loop receiver
 [NASA-CASE-NPO-11628-1] c07 N73-30113

LOOPS

Tape cartridge with high capacity storage of endless-loop magnetic tape
 [NASA-CASE-XGS-00769] c14 N70-41647
 Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
 [NASA-CASE-XGS-01223] c07 N71-10609
 Filter for third order phase locked loops in signal receivers
 [NASA-CASE-NPO-11941-1] c10 N73-27171
 High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
 [NASA-CASE-ARC-10516-1] c23 N74-21300
 Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
 [NASA-CASE-LAR-10168-1] c09 N74-22865

LOW ASPECT RATIO

Aerospace configuration with low and high aspect ratio variability for high and low speed flight
 [NASA-CASE-XLA-00142] c02 N70-33286
 Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
 [NASA-CASE-XLA-00806] c02 N70-34858

LOW COST

Low cost efficient thermionic converter for use in nuclear reactors
 [NASA-CASE-NPO-13121-1] c22 N73-12702
 Lightweight reflector assembly and method
 [NASA-CASE-NPO-13707-1] c74 N75-32894

LOW DENSITY MATERIALS

Method and photodetector device for locating abnormal voids in low density materials
 [NASA-CASE-MPS-20044] c14 N71-28993
 Intumescent composition, foamed product prepared therewith and process for making same
 [NASA-CASE-ARC-10304-2] c18 N74-27037
 Process for preparing low density polybenzimidazole foams
 [NASA-CASE-ARC-10823-1] c27 N75-24938
 Mixing insert for foam dispensing apparatus
 [NASA-CASE-MPS-20607-1] c37 N76-19436

LOW FREQUENCIES

Determining sway of buildings by low frequency device using pendulum
 [NASA-CASE-XMP-00479] c14 N70-34794

LOW GRAVITY MANUFACTURING

A method and apparatus for continuously processing a single crystalline ribbon in a reduced gravity environment
 [NASA-CASE-MPS-23002-1] c76 N76-13934
 Method for manufacturing mirrors in zero gravity environment
 [NASA-CASE-MSC-12611-1] c12 N76-15189

LOW MOLECULAR WEIGHTS

Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
 [NASA-CASE-XMP-08674] c06 N71-28807

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Low phase noise frequency divider for use with

- deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
- LOW PRESSURE**
Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546
- LOW SPEED**
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMP-02966] c10 N71-24863
- LOW TEMPERATURE**
Low to high temperature energy conversion system --- using ammonia
[NASA-CASE-NPO-13510-1] c44 N75-16972
- LOW TEMPERATURE ENVIRONMENTS**
Flexible, fragile electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986
- LOW TEMPERATURE TESTS**
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659
Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMP-10968] c14 N71-24234
- LOW VACUUM**
Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
- LOW VOLTAGE**
High speed low level voltage commutating switch
[NASA-CASE-IAC-00060] c09 N70-39915
Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MS-C-12101] c09 N71-18720
Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- LUBRICANTS**
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c15 N74-21058
Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c15 N74-21061
- LUBRICATING OILS**
Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
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Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383
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[NASA-CASE-KSC-10723-1] c37 N75-13265
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[NASA-CASE-LEW-11076-4] c37 N76-15461
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Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
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[NASA-CASE-LEW-11076-2] c15 N74-32921
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[NASA-CASE-XMS-12158-1] c31 N69-27499
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[NASA-CASE-ARC-10030] c09 N71-12521
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[NASA-CASE-XLA-01987] c23 N71-23976
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[NASA-CASE-XLA-00062] c14 N70-33254
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[NASA-CASE-XNP-06510] c14 N71-23797
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[NASA-CASE-XHQ-03673] c33 N71-29046
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[NASA-CASE-XMS-07168] c07 N71-11300
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- LUNAR COMPOSITION**
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Backpack carrier with retractable legs suitable for lunar exploration and convertible to rescue vehicle
[NASA-CASE-LAR-10056] c05 N71-12351
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[NASA-CASE-XLA-00934] c14 N71-22765
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[NASA-CASE-MFS-20130] c28 N71-27585
Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
- LUNAR GRAVITATION**
Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
- LUNAR GRAVITY SIMULATOR**
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
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[NASA-CASE-XFR-00929] c31 N70-34966
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[NASA-CASE-MFS-20130] c28 N71-27585
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[NASA-CASE-XNP-01412] c15 N70-42034
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[NASA-CASE-XNP-09770] c15 N71-20440
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[NASA-CASE-XNP-09770-3] c11 N71-27036
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[NASA-CASE-MFS-20774] c14 N73-19420

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[NASA-CASE-MSC-12408-1] c13 N74-13011

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[NASA-CASE-MFS-20400] c31 N71-18611
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[NASA-CASE-MFS-13929] c15 N71-27091

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[NASA-CASE-XMS-01615] c05 N70-41329

M

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[NASA-CASE-XNP-07478] c14 N69-21923
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[NASA-CASE-XLE-01092] c15 N71-22797
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[NASA-CASE-XMS-04178] c15 N71-22798
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[NASA-CASE-XLE-06773] c15 N71-23817
Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge
[NASA-CASE-FRC-10005] c15 N71-26145
Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
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[NASA-CASE-NPO-13281-1] c37 N75-13266
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[NASA-CASE-LAR-10953-1] c17 N73-27446

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[NASA-CASE-XLA-01262] c15 N71-21404
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

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MAGNETIC CIRCUITS

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[NASA-CASE-XLE-01124] c28 N71-14043

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[NASA-CASE-XLA-00327] c25 N71-29184
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[NASA-CASE-XGS-00458] c09 N70-38604
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[NASA-CASE-NPO-10201] c08 N71-18694
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MAGNETIC DIPOLES

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[NASA-CASE-XMS-06949] c09 N69-21467

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[NASA-CASE-XGS-00174] c08 N70-34743

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[NASA-CASE-XMP-05835] c08 N71-12504

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[NASA-CASE-XGS-04224] c10 N71-26418

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[NASA-CASE-GSC-10564] c10 N71-29135

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[NASA-CASE-XGS-00769] c14 N70-41647

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[NASA-CASE-NPO-11317-2] c16 N74-13205

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[NASA-CASE-XGS-01881] c09 N70-40123

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[NASA-CASE-NPO-13388-1] c35 N76-16390

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[NASA-CASE-LAR-11387-1] c04 N76-20114

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[NASA-CASE-XNP-09771] c09 N71-24841

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[NASA-CASE-XMP-03844-1] c14 N71-26474

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[NASA-CASE-NPO-10567] c08 N71-24633

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[NASA-CASE-MSC-12357] c15 N73-12489

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[NASA-CASE-LAR-10416-1] c18 N74-30001

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[NASA-CASE-XMP-00148] c28 N70-38710

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[NASA-CASE-MFS-22707-1] c37 N76-15457
- Remote manipulator system
[NASA-CASE-MFS-22022-1] c37 N76-15460
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self-locomotion capability of astronauts in
rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
- MANNED ORBITAL RESEARCH LABORATORIES**
- Manned space station collapsible for launching
and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
- Radial module manned space station with
artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
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- Three-port transfer valve with one port open
continuously suitable for manned space flight
[NASA-CASE-YAC-01158] c15 N71-23051
- Device for removing air from water for use in
life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
- MANNED SPACECRAFT**
- Manned space capsule configuration for orbital
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[NASA-CASE-XLA-00149] c31 N70-37938
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[NASA-CASE-XLA-00241] c31 N70-37986
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from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
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- Development of method for producing artificial
gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881
- Chlorine generator for purifying water in life
support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
- Spacecraft with artificial gravity and earthlike
atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750
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[NASA-CASE-XAC-00030] c14 N70-34820
- Absolute pressure measuring device for measuring
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[NASA-CASE-LAR-10000] c14 N73-30394
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- Multiple circuit switch apparatus requiring
minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Manual control mechanism for adjusting control
rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- Manually activated heat pump for mechanically
converting human operator output into heat
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[NASA-CASE-NPO-10677] c05 N72-11084
- Development of flight simulator system to show
position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
- Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c03 N74-10942
- G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381
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[NASA-CASE-XMS-02532] c15 N70-41808
- Method for making screen with unlimited fineness
of mesh and screen thickness
[NASA-CASE-XLE-00953] c15 N71-15966
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operations in low and zero gravity
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[NASA-CASE-MFS-20410] c15 N71-19214
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coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
- Method of making solid propellant rocket motor
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long shelf life, and capable of firing with
nozzle closure with foamed plastic permanent
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[NASA-CASE-XLA-04126] c28 N71-26779
- Shielded flat conductor cable fabricated by
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[NASA-CASE-MFS-13687] c09 N71-28691
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[NASA-CASE-XNP-04339] c17 N71-29137
- Method of making porous conductive supports for
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[NASA-CASE-GSC-11367-1] c03 N74-19692
- Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c15 N74-32917
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[NASA-CASE-LAR-10337-1] c24 N75-30260
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[NASA-CASE-ARC-10900-1] c35 N76-13455
- Manufacture of glass-to-metal seals wherein the
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[NASA-CASE-XLE-00301] c14 N70-36808
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[NASA-CASE-XLA-01401] c15 N71-21179
- Spacecraft transponder and ground station radar
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[NASA-CASE-NPO-11001] c07 N72-21118
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[NASA-CASE-MSC-19442-1] c74 N75-22119
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vehicles to any landing site
[NASA-CASE-LAR-10626-1] c14 N74-21015
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[NASA-CASE-IGS-10518] c16 N71-28554
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[NASA-CASE-NPO-11437] c16 N72-28521
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[NASA-CASE-XNP-02092] c15 N70-42033
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[NASA-CASE-XGS-04993] c14 N71-17574
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[NASA-CASE-XMS-03371] c05 N70-42000
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[NASA-CASE-LAR-10083-1] c15 N71-27006
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- of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813
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[NASA-CASE-XMP-04134] c14 N71-23755
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[NASA-CASE-NPO-10185] c10 N71-26339
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[NASA-CASE-XLE-03157] c28 N71-24736
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[NASA-CASE-MFS-20485] c14 N72-11365
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[NASA-CASE-LAR-10578-1] c12 N73-25262
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[NASA-CASE-LAR-10180-1] c06 N71-13461
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[NASA-CASE-XNP-01056] c14 N71-23041
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electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
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encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
- High speed scanner for measuring mass of
preselected gases at high sampling rate
[NASA-CASE-LAR-10766-1] c14 N72-21432
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[NASA-CASE-GSC-10903-1] c14 N73-12444
- Quadrupole mass spectrometer using noise
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[NASA-CASE-XNP-04231] c14 N73-32325
- Fast scan control for deflection type mass
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[NASA-CASE-LAR-11428-1] c14 N74-34857
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[NASA-CASE-NPO-13663-1] c35 N76-13456
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[NASA-CASE-GSC-12077-1] c35 N76-13465
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[NASA-CASE-GSC-11889-1] c35 N76-16393
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[NASA-CASE-XPR-00811] c15 N70-36901
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[NASA-CASE-XMP-01887] c15 N71-10617
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[NASA-CASE-XKS-01985] c15 N71-10782
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[NASA-CASE-MFS-10340] c15 N71-17628
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toxic, corrosive, or noxious fluids and fumes
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[NASA-CASE-XMS-01905] c12 N71-21089
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[NASA-CASE-XMP-09902] c15 N72-11387
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[NASA-CASE-LAR-10961-1] c15 N73-12496
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[NASA-CASE-NPO-11213] c15 N73-20514
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[NASA-CASE-MFS-20242] c14 N73-19421
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[NASA-CASE-MFS-20673] c14 N73-20476
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- Fabrication methods for matrices of solar cell
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[NASA-CASE-XLA-00941] c14 N71-23240
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[NASA-CASE-MS-C-12109] c18 N71-26285
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[NASA-CASE-ARC-10443-1] c14 N73-20477
- Cold cathode discharge tube with pressurized gas
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[NASA-CASE-XPR-07172] c05 N71-27234

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[NASA-CASE-XNP-00250] c11 N71-28779

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[NASA-CASE-LAR-10184] c14 N72-22445

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[NASA-CASE-XLE-03940] c18 N71-26153

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[NASA-CASE-XLE-03940-2] c17 N72-28536

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[NASA-CASE-LEW-11388-2] c15 N74-21055

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[NASA-CASE-GSC-10709-1] c28 N71-25213

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- [NASA-CASE-XMP-00389] c31 N70-34176
Steerable solid propellant rocket motor adapted to effect payload orientation as multistage rocket stage or reduce velocity as retrorocket
- [NASA-CASE-XMP-00234] c28 N70-38645
Multi-mission space vehicle module stage design
- [NASA-CASE-XMP-01543] c31 N71-17730
Separation mechanism for use between stages of multistage rocket vehicles
- [NASA-CASE-XLA-00188] c15 N71-22874
Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
- [NASA-CASE-XLA-04804] c31 N71-23008
Frangible connecting link suitable for rocket stage separation
- [NASA-CASE-MSC-11849-1] c15 N72-22488
- MULTIVIBRATORS**
- Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
- [NASA-CASE-XGS-00381] c09 N70-34819
Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
- [NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
- [NASA-CASE-XGS-00131] c09 N70-38995
Improved semiconductor multivibrator circuit which approaches 100 percent efficiency
- [NASA-CASE-XAC-00942] c10 N71-16042
Transistorized dc-coupled multivibrator with noninverted output signal
- [NASA-CASE-XMP-09450] c10 N71-18723
One shot multivibrator circuit for producing long duration output pulses
- [NASA-CASE-ARC-10137-1] c09 N71-28468
- MUSCLES**
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles
- [NASA-CASE-NPO-13423-1] c33 N75-31329

MUSCULAR FUNCTION

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338

MUSCULOSKELETAL SYSTEM

Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738

MYOCARDIUM

Myocardium wall thickness transducer
[NASA-CASE-NPO-13644-1] c35 N75-22689

N

NACELLES

Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788

Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493

NAVIGATION AIDS

Binocular attachment --- for display of numerical information in the field of view of the binoculars
[NASA-CASE-LAR-11782-1] c35 N75-30516

Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114

NAVIGATION INSTRUMENTS

Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N75-15019

NAVIGATION SATELLITES

Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948

NEAR INFRARED RADIATION

Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389

NEGATIVE FEEDBACK

Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

NETWORK SYNTHESIS

Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595

High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

NEUTRALIZERS

Method and apparatus for neutralizing potentials induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N75-27265

NEUTRON EMISSION

Deuterium pass through target --- neutron emitting target
[NASA-CASE-LEW-11866-1] c72 N76-15860

NICKEL

Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142

Selective nickel deposition on irradiation sensitive compounds
[NASA-CASE-LEW-10965-1] c15 N72-25452

Brazing alloy composition
[NASA-CASE-XNP-06053] c26 N75-27126

NICKEL ALLOYS

Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283

Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616

Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026

High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535

Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c15 N74-21055

A zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N75-26087

Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236

Nickel base alloy
[NASA-CASE-LEW-12270-1] c26 N76-14247

NICKEL CADMIUM BATTERIES

Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c14 N74-27859

NICKEL COATINGS

Intermetallic chromium containing nickel aluminate for high temperature corrosion protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414

NICKEL COMPOUNDS

Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608

Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127

NICKEL PLATE

Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830

NIOBIUM

Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

A length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N76-17384

NITRIDES

Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054

NITRILES

Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562

Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-1] c06 N74-34579

NITROAMINES

Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469

Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147

NITROGEN

The 3-5 photocathode with nitrogen doping for increased quantum efficiency --- using acceptor materials
[NASA-CASE-NPO-12134-1] c33 N75-16745

NITROGEN DIOXIDE

Method for detecting pollutants --- ozone, nitrogen dioxide, carbon dioxide
[NASA-CASE-LAR-11405-1] c35 N75-15938

NITROGEN TETROXIDE

Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094

NITROGUANIDINE

Solid propellant stabilizer containing nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699

NOISE GENERATORS

Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582

Method of and means for testing a tape record/playback system
[NASA-CASE-MFS-22671-2] c35 N75-31418

NOISE METERS

Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614

NOISE REDUCTION

Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332

Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425

SUBJECT INDEX

NOZZLE DESIGN

- Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XMP-01813] c28 N70-41582
- Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
- Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
- Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MS-C-12223-1] c07 N71-26181
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
- Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- Jet aircraft exhaust nozzle for noise reduction
[NASA-CASE-LAR-10951-1] c28 N73-19819
- Development of aircraft configuration for reduction of jet aircraft noise by exhausting engine gases over upper surface of wing
[NASA-CASE-LAR-11087-1] c02 N73-26008
- Method and apparatus for improving operating efficiency and reducing low speed noise for turbine aircraft engines
[NASA-CASE-LAR-11310-1] c28 N73-31699
- Method for eliminating noise and debris of explosive welding techniques by using complete enclosure
[NASA-CASE-LAR-10941-2] c15 N73-32371
- Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c28 N74-15453
- Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c15 N74-21057
- Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c02 N74-27490
- Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c28 N74-28226
- Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c28 N74-31270
- Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c02 N74-32418
- Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c28 N74-33218
- Television noise reduction device
[NASA-CASE-MS-C-12607-1] c32 N75-21485
- Optical noise suppression device and method --- for optical data processing computer having laser light source
[NASA-CASE-MS-C-12640-1] c74 N75-28871
- Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N75-32134
- Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
- Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
- NOISE TEMPERATURE**
Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- NOISE THRESHOLD**
Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MS-C-12165-1] c07 N71-33696
- NONDESTRUCTIVE TESTS**
Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
- Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964
- Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788
- Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMP-02221] c18 N71-27170
- Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
- Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124
- NONEQUILIBRIUM PLASMAS**
Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
- NONFLAMMABLE MATERIALS**
Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
- Process for developing flame retardant elastomeric composition textiles for use in space suits
[NASA-CASE-MS-C-14331-1] c18 N73-27501
- NONLINEAR FEEDBACK**
Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NPO-11921-1] c07 N74-30523
- Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c33 N76-14373
- NONLINEAR SYSTEMS**
Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-XMP-00701] c09 N70-40272
- Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594
- Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222
- NOSE CONES**
Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637
- Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-IMS-04312] c07 N71-22984
- NOSE WHEELS**
Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160
- NOTCH TESTS**
Vee-notching device --- with adjustable carriage
[NASA-CASE-MFS-20730-1] c14 N74-13131
- NOZZLE DESIGN**
High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284
- Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
- Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
- Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637
- Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-XMP-00968] c28 N71-15660
- Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MFS-11497] c28 N71-16224
- Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
- Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068
- Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NPO-11758-1] c15 N74-23065

NOZZLE FLOW

- System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
- Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MPS-20831] c28 N71-29153
- NOZZLE INSERTS**
- Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41967
- NUCLEAR ELECTRIC POWER GENERATION**
- Nuclear electric generator for accelerating charged propellant particles in electrostatic propulsion system
[NASA-CASE-XLE-00818] c22 N70-34248
- NUCLEAR EXPLOSION EFFECT**
- Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-XNP-01310] c33 N71-28852
- NUCLEAR FUEL BURNUP**
- Low cost efficient thermionic converter for use in nuclear reactors
[NASA-CASE-NPO-13121-1] c22 N73-12702
- NUCLEAR FUEL ELEMENTS**
- Tungsten-coated tungsten-uranium dioxide nuclear fuel plates
[NASA-CASE-XLE-00209] c22 N73-32528
- NUCLEAR MAGNETIC RESONANCE**
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- NUCLEAR POWER PLANTS**
- Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046
- NUCLEAR REACTOR CONTROL**
- Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597
- NUCLEAR REACTORS**
- Low cost efficient thermionic converter for use in nuclear reactors
[NASA-CASE-NPO-13121-1] c22 N73-12702
- NUCLEAR ROCKET ENGINES**
- Nuclear gaseous reactor for heating working fluid to high temperatures
[NASA-CASE-XLE-00321] c22 N70-34572
- NUCLEATE BOILING**
- Method for improving heat transfer characteristics in nucleate boiling process
[NASA-CASE-XMS-04268] c33 N71-16277
- NULL ZONES**
- Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- NUMERICAL CONTROL**
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- NUMERICAL INTEGRATION**
- Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- Binary concatenated coding system to measure, count, and record numerical information using minimized number of digits
[NASA-CASE-MSC-14082-1] c08 N73-16163
- MUTATION**
- Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMP-00442] c31 N71-10747
- Mutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513
- NUTS (PASTERERS)**
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
- Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
- O**
- O RING SEALS**
- High pressure four-way valve with O ring adapted to pass across inlet port
[NASA-CASE-XNP-00214] c15 N70-36908
- OCEAN SURFACE**
- High visibility air sea rescue panel
[NASA-CASE-MSC-12564-1] c54 N76-15792
- OHMMETERS**
- Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497
- OILS**
- Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMP-01779] c12 N71-20815
- Cross linked polymer system for oil or fat absorption properties
[NASA-CASE-NPO-11609-1] c06 N72-22114
- OMNIDIRECTIONAL ANTENNAS**
- Microwave omnidirectional antenna for use on spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
- Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
- Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247
- ONBOARD EQUIPMENT**
- Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
- Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41871
- Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMP-02433] c14 N71-10616
- Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
- Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
- Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613
- Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
- Monostable multivibrator for conserving power in spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
- Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despinn mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
- Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
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[NASA-CASE-LAR-11387-1] c04 N76-20114
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- Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
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[NASA-CASE-LEW-12051-1] c52 N75-33640
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- Specifications and drawings for semipassive optical communication system
[NASA-CASE-XLA-01090] c07 N71-12389
- Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
- Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963
- High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
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[NASA-CASE-NPO-13531-1] c36 N75-13243
- Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c74 N76-18913
- Wideband heterodyne receiver for a laser communication system
[NASA-CASE-GSC-12053-1] c36 N76-20466
- OPTICAL COUPLING**
- Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MFS-21660-1] c14 N74-21017
- OPTICAL DATA PROCESSING**
- Optical data processing system using paraboloidal reflecting surfaces
[NASA-CASE-GSC-11296-1] c23 N73-30666
- Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c07 N74-15831
- OPTICAL EMISSION SPECTROSCOPY**
- Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
- OPTICAL EQUIPMENT**
- Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
- Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
- Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
- Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
- Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- Borescope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
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[NASA-CASE-GSC-11188-2] c21 N73-19630
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[NASA-CASE-LAR-10726-1] c14 N73-20475
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- Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
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- Optical instrument employing reticle having preselected visual response pattern formed thereon
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[NASA-CASE-XNP-04111] c14 N71-15622
- Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
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- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
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[NASA-CASE-XMS-00945] c09 N71-10798
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hydrogen
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tubular bodies from thermosetting plastics
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[NASA-CASE-XAC-00042] c14 N70-34816
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- Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41961
- Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N75-19480
- PULSE DURATION**
- Frequency to analog converters with unipolar field effect transistor for determining potential charge by pulse duration of input signal
[NASA-CASE-XNP-07040] c08 N71-12500
- Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-IMP-06519] c09 N71-12519
- Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447
- Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MPS-10068] c10 N71-25139
- One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
- Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c10 N74-32711
- PULSE DURATION MODULATION**
- Pulse duration modulation multiplier system
[NASA-CASE-XER-09213] c07 N71-12390
- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
- Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMP-05195] c10 N71-24861
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- Load current sensor for series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249
- PULSE FREQUENCY MODULATION**
- Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
- Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696
- PULSE GENERATORS**
- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-IGS-03058] c10 N71-19547
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-IGS-03632] c09 N71-23311
- Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MPS-21233-1] c23 N74-15395
- Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515
- PULSE RATE**
- Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
- Peak holding circuit for extremely narrow pulses
[NASA-CASE-MSC-14129-1] c33 N75-18479
- PULSED LASERS**
- Repetitively pulsed wavelength selective carbon dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832
- Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- PULSED RADIATION**
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427

PULSES

High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119

PUMP SEALS

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c15 N74-10474

PUMPS

Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824

Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XNP-04042] c15 N71-23023

Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042

Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MFS-20830] c15 N71-30028

Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465

Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c15 N74-27904

Solar powered pump
[NASA-CASE-NPO-13567-1] c37 N75-22746

PUNCHED CARDS

Describing device for flagging punched business cards
[NASA-CASE-XLA-02705] c08 N71-15908

Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133

PUNCHES

Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811

PURGING

Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015

Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588

Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089

Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28849

PURIFICATION

Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-XNP-06888] c15 N71-24044

Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184

Water purification process
[NASA-CASE-ARC-10643-2] c51 N75-13506

PURITY

Synthesis of high purity dianilinosilanes
[NASA-CASE-XNP-06409] c06 N71-23230

PUSH-PULL AMPLIFIERS

Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N75-21518

PYROLYSIS

Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
[NASA-CASE-MSC-12669-1] c44 N76-16621

PYROLYTIC GRAPHITE

Multislit film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-XNP-04389] c28 N71-20942

PYROLYTIC MATERIALS

Design, development, and characteristics of ablation structures
[NASA-CASE-XMS-01816] c33 N71-15623

PYROMETERS

Sensor device with switches for measuring surface recession of charring and noncharring ablaters
[NASA-CASE-XLA-01781] c14 N69-39975

PYROTECHNICS

Energy source with tantalum capacitors in parallel and miniature silver oxide button cells for initiating pyrotechnic devices on spacecraft and rocket vehicles
[NASA-CASE-LAR-10367-1] c03 N70-26817

Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle
[NASA-CASE-NPO-11330] c33 N73-26958

Q

Q SWITCHED LASERS

Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c33 N74-27425

Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c16 N74-34010

Q VALUES

Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256

QUADRATURES

Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MFS-21660-1] c14 N74-21017

QUALITATIVE ANALYSIS

Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428

Analysis of volatile organic compounds --- quantitative and qualitative analysis of trace amounts in gas samples
[NASA-CASE-MSC-14428-1] c06 N74-19776

QUANTITATIVE ANALYSIS

Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199

Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397

Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428

Nondispersive gas analysis using radiation detection for quantitative analysis
[NASA-CASE-ARC-10308-1] c06 N72-31141

Analysis of volatile organic compounds --- quantitative and qualitative analysis of trace amounts in gas samples
[NASA-CASE-MSC-14428-1] c06 N74-19776

QUANTUM THEORY

The 3-5 photocathode with nitrogen doping for increased quantum efficiency --- using acceptor materials
[NASA-CASE-NPO-12134-1] c33 N75-16745

QUARTZ

Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332

QUARTZ LAMPS

High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312

Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c15 N74-23066

R

RACKS (FRAMES)

Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267

Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c32 N74-27397

RADAR ANTENNAS

- Interferometric tuning acquisition and tracking radar antenna system
[NASA-CASE-XMS-09610] c07 N71-24625
- Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295
- Highly-efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365

RADAR EQUIPMENT

- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118

RADAR IMAGERY

- Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N75-26206
- Method of locating persons in distress --- by using radar imagery from radar reflectors
[NASA-CASE-LAR-11390-1] c32 N76-18315

RADAR RANGE

- Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-NXP-00748] c07 N70-36911

RADAR RECEIVERS

- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864

RADAR RECEPTION

- Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-NXP-00748] c07 N70-36911

RADAR REFLECTORS

- Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- Method of locating persons in distress --- by using radar imagery from radar reflectors
[NASA-CASE-LAR-11390-1] c32 N76-18315

RADAR TRACKING

- Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
- Monopulse tracking system with antenna array of three radiators for deriving azimuth and elevation indications
[NASA-CASE-XGS-01155] c10 N71-21483
- Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117

RADAR TRANSMITTERS

- High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119

RADIAL FLOW

- Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459

RADIANCE

- Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-YAC-02970] c14 N69-39896

RADIANT COOLING

- Direct radiation cooling of linear beam collector tubes
[NASA-CASE-NXP-09227] c15 N69-24319
- High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875

RADIANT FLUX DENSITY

- High intensity radiant energy pulse source for calibrating heat transfer gages with thermoluminescent shutter activation
[NASA-CASE-ARC-10178-1] c09 N72-17152

RADIANT HEATING

- High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress

- [NASA-CASE-XLA-00141] c09 N70-33312
- High temperature source of thermal radiation
[NASA-CASE-XLB-00490] c33 N70-34545
- Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-MPS-14253] c33 N71-24858
- Solar energy trap
[NASA-CASE-MPS-22744-1] c44 N75-10586

RADIATION

- Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
- Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NPO-11493] c14 N73-12447
- Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c09 N74-29577
- Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-2] c60 N76-18803

RADIATION ABSORPTION

- NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502

RADIATION COUNTERS

- Particle detector for indicating incidence and energy of minute space particles
[NASA-CASE-XLA-00135] c14 N70-33322
- Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
- Solid state device for mapping flux and power in nuclear reactor cores
[NASA-CASE-XLE-00301] c14 N70-36808
- Particle beam power density detection and measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602
- Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-NXP-03128] c10 N70-41991
- Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
- Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
[NASA-CASE-XLA-03645] c14 N71-20430
- Apparatus for detecting particle emission lower than noise level of multiplier tube
[NASA-CASE-XLA-07813] c14 N72-17328
- Radiation or charged particle detector and amplifier
[NASA-CASE-NPO-12128-1] c14 N73-32317
- Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c14 N74-26949

RADIATION DAMAGE

- Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells
[NASA-CASE-XLE-02798] c26 N71-23654
- Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062
- Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ARC-10593-1] c09 N74-27682

RADIATION DETECTORS

- Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-HSC-12280] c27 N71-16348
- Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Circuit design for determining amount of photomultiplier tube light detection utilizing variable current source and dark current signals of opposite polarity
[NASA-CASE-XMS-03478] c14 N71-21040
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet

- [NASA-CASE-XLA-00793] c21 N71-22880
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
- [NASA-CASE-XGS-03230] c14 N71-23401
Nondispersive gas analysis using radiation detection for quantitative analysis
- [NASA-CASE-ARC-10308-1] c06 N72-31141
Radiation source tracker comprised of sectored matrix of detectors with output voltages corresponding to irradiance levels
- [NASA-CASE-NPO-11686] c14 N73-25462
Radiation or charged particle detector and amplifier
- [NASA-CASE-NPO-12128-1] c14 N73-32317
Mossbauer spectrometer radiation detector
- [NASA-CASE-LAR-11155-1] c14 N74-15091
High field CdS detector for infrared radiation
- [NASA-CASE-LAR-11027-1] c14 N74-18088
Flame detector operable in presence of proton radiation
- [NASA-CASE-MFS-21577-1] c03 N74-29410
Detector absorptivity measuring method and apparatus
- [NASA-CASE-LAR-10907-1] c35 N75-19629
Wide angle sun sensor --- consisting of cylinder, insulation and pair of detectors
- [NASA-CASE-NPO-13327-1] c35 N75-23910
- RADIATION DISTRIBUTION**
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
- [NASA-CASE-XNP-00459] c11 N70-38675
- RADIATION DOSAGE**
Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
- [NASA-CASE-XLA-03645] c14 N71-20430
- RADIATION EFFECTS**
Method for temperature compensating semiconductor gages by exposure to high energy radiation
- [NASA-CASE-XLA-04555-1] c14 N71-25892
- RADIATION HARDENING**
Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
- [NASA-CASE-GSC-11425-1] c24 N74-20329
- RADIATION MEASUREMENT**
Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
- [NASA-CASE-NPO-11493] c14 N73-12447
- RADIATION MEASURING INSTRUMENTS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
- [NASA-CASE-XGS-08266] c14 N69-27432
Infrared scanning system for maintaining spacecraft orientation with earth reference
- [NASA-CASE-XLA-00120] c21 N70-33181
Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
- [NASA-CASE-XLE-00011] c14 N70-41946
Development of method for improving signal to noise ratio and accuracy of Wheatstone bridge type radiation measuring instrument
- [NASA-CASE-XLA-02810] c14 N71-25901
Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
- [NASA-CASE-NPO-11493] c14 N73-12447
Phototransistor with base collector junction diode for integration into photo sensor arrays
- [NASA-CASE-MFS-20407] c09 N73-19235
Method and apparatus for measuring electromagnetic radiation
- [NASA-CASE-LEW-11159-1] c14 N73-28488
Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
- [NASA-CASE-MFS-21441-1] c14 N73-30392
Coaxial anode wire for gas radiation counters
- [NASA-CASE-GSC-11492-1] c14 N74-26949
- RADIATION PROTECTION**
Development of method for protecting large and oddly shaped areas from radiant and convective heat
- [NASA-CASE-XNP-01310] c33 N71-28852
- Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
- [NASA-CASE-MFS-20180] c16 N72-12440
Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
- [NASA-CASE-ARC-10593-1] c09 N74-27682
- RADIATION SHIELDING**
Encapsulated heater forming hollow body for cathode used in ion thruster
- [NASA-CASE-LEW-10814-1] c28 N70-35422
Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
- [NASA-CASE-XLA-07424] c14 N71-18482
Sealed housing for protecting electronic equipment against electromagnetic interference
- [NASA-CASE-MSC-12168-1] c09 N71-18600
Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
- [NASA-CASE-LEW-10210-1] c28 N71-26781
Light shield and cooling apparatus --- high intensity ultraviolet lamp
- [NASA-CASE-LAR-10089-1] c15 N74-23066
- RADIATION SOURCES**
Sight switch using infrared source and sensor mounted beside eye
- [NASA-CASE-XMP-03934] c09 N71-22985
Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
- [NASA-CASE-MFS-20095] c24 N72-11595
Radiation source tracker comprised of sectored matrix of detectors with output voltages corresponding to irradiance levels
- [NASA-CASE-NPO-11686] c14 N73-25462
High powered arc electrodes --- producing solar simulator radiation
- [NASA-CASE-LEW-11162-1] c09 N74-12913
Electric arc light source having undercut recessed anode
- [NASA-CASE-ARC-10266-1] c33 N75-29318
- RADIATION SPECTRA**
Maksutov spectrograph for low light level research
- [NASA-CASE-XLA-10402] c14 N71-29041
- RADIATION TOLERANCE**
Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
- [NASA-CASE-XGS-04119] c18 N69-39979
Doping silicon material with gadolinium to increase radiation resistance of solar cells
- [NASA-CASE-XLE-02792] c26 N71-10607
Improving radiation resistance of silicon semiconductor junctions by doping with lithium
- [NASA-CASE-XGS-07801] c09 N71-12513
Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential
- [NASA-CASE-GSC-11425-2] c76 N75-25730
- RADIATIVE HEAT TRANSFER**
Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
- [NASA-CASE-XMS-05909-1] c14 N69-27459
Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
- [NASA-CASE-XLE-03307] c33 N71-14035
Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
- [NASA-CASE-XNP-09802] c33 N71-15641
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
- [NASA-CASE-XNP-02923] c28 N71-23081
- RADIATORS**
Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
- [NASA-CASE-XHQ-03673] c33 N71-29046
- RADIO ANTENNAS**
Low loss parasitic probe antenna for prelaunch tests of spacecraft antennas
- [NASA-CASE-XKS-09348] c09 N71-13521
VHF/UHF parasitic probe antenna for spacecraft communication
- [NASA-CASE-XKS-09340] c07 N71-24614

- Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-RQN-00937] c07 N71-28979
- Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
- RADIO ASTRONOMY**
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- RADIO CONTROL**
Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
- RADIO FREQUENCIES**
Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330
- Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMP-09422] c07 N71-19436
- Development of automatic frequency discriminators and control for phase lock loop providing frequency preset capabilities
[NASA-CASE-XMP-08665] c10 N71-19467
- System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
- Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-04418] c09 N71-23573
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NPO-11291-1] c14 N73-30388
- Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
- Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321
- RADIO FREQUENCY INTERFERENCE**
Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
- System for interference signal nulling by polarization adjustment
[NASA-CASE-NPO-13140-1] c32 N75-24982
- RADIO FREQUENCY SHIELDING**
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- Process for making RF shielded cable connector assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- RADIO RECEIVERS**
Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
- Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
- RADIO RELAY SYSTEMS**
Satellite radio communication system with remote steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
- RADIO SIGNALS**
Erectable, inflatable, radio signal reflecting passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
- Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- RADIO STARS**
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
- RADIO TELEMETRY**
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
- RADIO TRANSMITTERS**
Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194
- RADIO WAVES**
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[NASA-CASE-ERC-10119] c26 N72-21701
- RADIOACTIVE ISOTOPEs**
Thermally cascaded thermoelectric generator with radioisotopic heat source
[NASA-CASE-NPO-10753] c03 N72-26031
- Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876
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[NASA-CASE-LEW-10518-1] c24 N72-33681
- RADIOGRAPHY**
Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
- Method and system for in vivo measurement of bone tissue
[NASA-CASE-MSC-14276-1] c54 N75-21948
- RADIOLYSIS**
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458
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Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
- Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
- Thermodielectric radiometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
- Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
- Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437
- Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
- Steady state thermal radiometers
[NASA-CASE-MPS-21108-1] c14 N74-27861
- RAIN**
Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
- RAMJET ENGINES**
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[NASA-CASE-XLE-00005] c28 N70-39899
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[NASA-CASE-XLA-02131] c32 N70-42003
- RANDOM NOISE**
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[NASA-CASE-NPO-10169] c10 N71-24844
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c23 N74-31148

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[NASA-CASE-MSC-14131-1] c33 N75-19515

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[NASA-CASE-XNP-01501] c21 N70-41930

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[NASA-CASE-XMS-05454-1] c07 N71-12391
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[NASA-CASE-NPO-10066] c09 N71-18598
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[NASA-CASE-NPO-11194] c08 N72-25209
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[NASA-CASE-NPO-11707] c07 N73-25161
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[NASA-CASE-LAR-10626-1] c14 N74-21015

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[NASA-CASE-IGS-03505] c03 N71-10608

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[NASA-CASE-NPO-13449-1] c36 N75-32441

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Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184

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Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217

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RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XMP-00906] c09 N70-41655
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[NASA-CASE-XMP-02966] c10 N71-24863
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[NASA-CASE-XNP-01068] c10 N71-28739
Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256
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[NASA-CASE-XAC-05462-2] c10 N72-17171
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Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
Temperature control system comprised of wheatstone bridge with RC circuit
[NASA-CASE-NPO-11304] c14 N73-26430
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[NASA-CASE-ARC-10364-3] c33 N75-19520

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[NASA-CASE-XLA-04063] c31 N71-33160

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[NASA-CASE-XGS-02629] c14 N71-21082
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[NASA-CASE-GSC-10555-1] c21 N71-27324

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[NASA-CASE-XLE-00724] c14 N70-34669

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[NASA-CASE-XLE-00301] c14 N70-36808
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[NASA-CASE-NPO-10542] c09 N72-27228

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Nonequilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N75-22108

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A zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N75-26087

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[NASA-CASE-XLE-00298] c22 N70-34501

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Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864
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[NASA-CASE-XLA-08799] c10 N71-27272

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Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015
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[NASA-CASE-MFS-21087-1] c14 N74-17153
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[NASA-CASE-LAR-11206-1] c23 N74-30118
Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c71 N75-13593
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[NASA-CASE-MFS-22537-1] c35 N75-27328
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[NASA-CASE-MFS-22060-1] c35 N75-29380

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[NASA-CASE-MSC-12259-1] c07 N70-12616
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[NASA-CASE-NPO-11593-1] c07 N73-28012
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[NASA-CASE-NPO-11628-1] c07 N73-30113
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[NASA-CASE-NPO-11921-1] c07 N74-30523
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[NASA-CASE-MSC-14557-1] c32 N76-16249

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[NASA-CASE-XLA-02605] c14 N71-10773
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[NASA-CASE-XMS-06061] c05 N71-23317
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[NASA-CASE-GSC-10614-1] c09 N72-11224
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[NASA-CASE-LAR-10806-1] c14 N74-32877

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Ejectable underwater sound source recovery assembly
[NASA-CASE-LAR-10595-1] c15 N74-16135

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[NASA-CASE-IMP-00389] c31 N70-34176

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Describing assembly for opening stabilizing and decelerating flaps of flight capsules used in space research
[NASA-CASE-IMP-03169] c31 N71-15675

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[NASA-CASE-XLA-00195] c02 N70-38009
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[NASA-CASE-LAR-10549-1] c31 N73-13898

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Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
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[NASA-CASE-XLE-10529] c14 N69-23191
Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-IMP-02713] c10 N69-39888
Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109
Voltage amplitude-responsive trigger circuit with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171
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[NASA-CASE-GSC-11126-1] c09 N72-25253

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Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
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[NASA-CASE-XLA-01787] c11 N71-16028
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[NASA-CASE-MFS-21046-1] c14 N73-27377

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[NASA-CASE-XLE-06461] c17 N72-22530
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458

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[NASA-CASE-GSC-10564] c10 N71-29135

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[NASA-CASE-GSC-11902-1] c35 N75-22687
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[NASA-CASE-XLA-01400] c07 N70-41331
Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
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[NASA-CASE-XLA-01552] c07 N71-11284

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[NASA-CASE-XMS-02677] c31 N70-42075
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[NASA-CASE-XMS-02009] c33 N71-20834
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[NASA-CASE-MSC-12143-1] c33 N72-17947
Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876

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[NASA-CASE-XLA-00165] c31 N70-33242
Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
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[NASA-CASE-XLA-04901] c31 N71-24315
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
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[NASA-CASE-MSC-14270-2] c18 N74-30004

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[NASA-CASE-KSC-10393] c09 N72-21247

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[NASA-CASE-IMP-08840] c23 N71-16365
Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-IMP-05844] c14 N71-17587
Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
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[NASA-CASE-LAR-10385-3] c23 N73-32538

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[NASA-CASE-MFS-20243] c23 N73-13662
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[NASA-CASE-MFS-21244-1] c36 N75-15028
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[NASA-CASE-MFS-13532] c18 N72-17532
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[NASA-CASE-LEW-11330-1] c44 N76-14612
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REFLECTORS

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 [NASA-CASE-IGS-09190] c31 N71-16102
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 [NASA-CASE-IGS-08269] c23 N71-26206
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 [NASA-CASE-GSC-10064-1] c10 N72-22235
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 [NASA-CASE-NPO-11264] c07 N72-25174
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 [NASA-CASE-NPO-11661] c07 N73-14130

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 [NASA-CASE-NPO-13614-1] c35 N75-19628

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 [NASA-CASE-XLE-00335] c14 N70-35368
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 [NASA-CASE-XMS-00370] c17 N71-20941
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 [NASA-CASE-XNP-02888] c18 N71-21068
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 [NASA-CASE-XPR-08476-1] c26 N72-17820
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 [NASA-CASE-MPS-20710] c11 N72-23215
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 [NASA-CASE-LEW-12053-1] c06 N74-34579

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 [NASA-CASE-XLE-00387] c33 N70-34812
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 [NASA-CASE-LEW-10393-1] c17 N71-15468
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 [NASA-CASE-XNP-04338] c17 N71-23046
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 [NASA-CASE-INP-03063] c17 N71-23365
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 [NASA-CASE-XLE-03432] c33 N71-24145
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 [NASA-CASE-XLE-03940] c18 N71-26153
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 [NASA-CASE-XLE-10910] c18 N71-29040
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 [NASA-CASE-XLE-03940-2] c17 N72-28536
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 [NASA-CASE-LEW-11169-1] c15 N74-18131
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[NASA-CASE-LEW-11179-1] c27 N76-16229
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 [NASA-CASE-NPO-10309] c15 N69-23190
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 [NASA-CASE-XNP-08877] c15 N71-23025
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 [NASA-CASE-GSC-10188-1] c23 N71-24725
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 [NASA-CASE-XNP-02654] c10 N70-42032
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 [NASA-CASE-XLE-00164] c15 N70-36411
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 [NASA-CASE-XLE-00150] c28 N70-41818
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 [NASA-CASE-XLE-00685] c28 N70-41992
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 [NASA-CASE-XLE-04857] c28 N71-23968
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 [NASA-CASE-NPO-13067-1] c60 N76-18800
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 [NASA-CASE-LAR-10203-1] c15 N72-16330
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 [NASA-CASE-LEW-10199-1] c18 N74-23125
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 [NASA-CASE-XNP-01962] c32 N70-41370
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[NASA-CASE-NPO-10694] c09 N72-20200
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[NASA-CASE-LEW-11087-3] c15 N74-21064
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[NASA-CASE-XNP-09776] c09 N69-39929
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[NASA-CASE-XLA-00711] c03 N71-12258
- Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
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[NASA-CASE-XAC-02405] c09 N71-16089
- Satellite radio communication system with remote steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
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[NASA-CASE-LEW-10387] c09 N72-22201
- Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
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[NASA-CASE-NPO-13386-1] c54 N75-27758
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[NASA-CASE-MFS-22707-1] c37 N76-15457
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[NASA-CASE-IMP-14032] c20 N71-16340
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[NASA-CASE-NPO-10143] c10 N71-26326
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[NASA-CASE-MFS-21415-1] c05 N74-20728

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[NASA-CASE-XMS-03792] c14 N70-41812
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[NASA-CASE-HSC-13407-1] c10 N72-20225

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[NASA-CASE-ERC-10112] c07 N72-21119

Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
[NASA-CASE-ERC-10267] c09 N72-23173

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172

Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187

Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NPO-11572] c07 N73-16121

Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386

Digital to analog converter for sampled signal reconstruction
[NASA-CASE-HSC-12458-1] c08 N73-32081

Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c09 N74-11050

Low level signal limiter
[NASA-CASE-XLE-04791] c14 N74-22096

Miniature multichannel biotelemeter system
[NASA-CASE-NPO-13065-1] c05 N74-26625

Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
[NASA-CASE-HSC-13999-1] c05 N74-26626

Pulse stretcher for narrow pulses
[NASA-CASE-HSC-14130-1] c10 N74-32711

Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539

System for measuring Reynolds stress in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N75-16770

Signal conditioning circuit apparatus --- with constant input impedance
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[NASA-CASE-HSC-12607-1] c32 N75-21485

Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NPO-13683-1] c35 N75-29383

Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429

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[NASA-CASE-GSC-12044-1] c60 N76-13781

Compact-bi-phase pulse coded modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371

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[NASA-CASE-LAR-11883-1] c35 N76-18415

Percutaneous connector device --- for transporting external electrical signals to internal body parts
[NASA-CASE-KSC-10849-1] c54 N76-19816

Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MFS-22729-1] c32 N76-21366

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Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-XNP-00748] c07 N70-36911

Reflectometer for receiver input impedance match measurement
[NASA-CASE-XNP-10843] c07 N71-11267

Diversity receiving system with diversity phase lock
[NASA-CASE-XGS-01222] c10 N71-20841

Design and development of signal detection and tracking apparatus
[NASA-CASE-XGS-03502] c10 N71-20852

Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098

Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741

Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
[NASA-CASE-HSC-12205-1] c07 N71-27056

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[NASA-CASE-ERC-10275] c26 N72-25680

Filter for third order phase locked loops in signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171

Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
[NASA-CASE-NPO-11738-1] c09 N73-30185

Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391

SIGNAL REFLECTION

Reflectometer for receiver input impedance match measurement
[NASA-CASE-XNP-10843] c07 N71-11267

SIGNAL STABILIZATION

Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962
Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138
System for interference signal nulling by polarization adjustment
[NASA-CASE-NPO-13140-1] c32 N75-24982

SIGNAL TO NOISE RATIOS

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-XNP-00748] c07 N70-36911
Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-XMP-00701] c09 N70-40272
Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-XNP-05254] c07 N71-20791
Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-XMP-04367] c09 N71-23545
Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119
Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
Signal to noise ratio determination circuit using bandpass limiter
[NASA-CASE-GSC-11239-1] c10 N73-25241
Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c07 N74-19788

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Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder
[NASA-CASE-XAC-00086] c09 N70-33182
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XMP-01160] c07 N71-11298
Bipolar phase detector and corrector for split phase PCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392
Automatic estimation of signal to noise ratio and other parameters in signal communication systems
[NASA-CASE-XNP-05254] c07 N71-20791
Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
Adaptive notch filter, using modulation techniques for reversed phase noise signal
[NASA-CASE-IMP-01892] c10 N71-22986
Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461
Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c09 N74-10194

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c07 N74-20809
Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c07 N74-20810
Aircraft mounted crash activated transmitter device
[NASA-CASE-MFS-16609-3] c09 N74-34647
Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c32 N75-21486
Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981
Rotating joint signal coupler
[NASA-CASE-LAR-11264-1] c33 N75-27261
Automatic transponder --- measurement of the internal delay time of a transponder
[NASA-CASE-GSC-12075-1] c32 N76-19318

SILANES

Preparation of elastomeric diamine silazane polymers
[NASA-CASE-XMP-04133] c06 N71-20717
Synthesis of high purity dianilinosilanes
[NASA-CASE-XMP-06409] c06 N71-23230
Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forms
[NASA-CASE-XMP-08674] c06 N71-28807

SILICATES

Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979

SILICIDES

Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-XLE-10910] c18 N71-29040
Pused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LBW-11179-1] c27 N76-16229

SILICON

Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449
Low cost substrates for polycrystalline solar cells
[NASA-CASE-GSC-12022-1] c44 N76-13597
Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LBW-11065-2] c44 N76-14600

SILICON CARBIDES

Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805
Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015

SILICON COMPOUNDS

Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
Process for preparing disilanolols with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030

SILICON CONTROLLED RECTIFIERS

Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984

- Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- SILICON DIOXIDE**
- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-INP-00920] c15 N71-15906
- Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c06 N74-19769
- Ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c18 N74-30004
- SILICON FILMS**
- Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
- SILICON JUNCTIONS**
- Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
- SILICON NITRIDES**
- Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c06 N74-19769
- Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N76-14613
- SILICON RADIATION DETECTORS**
- Lithium drifted silicon radiation detector with gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
- Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- SILICON TRANSISTORS**
- Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
- Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- SILICONE RESINS**
- Technique for bonding --- process for molding silicone elastomer into fiberglass honeycomb panel
[NASA-CASE-LAR-10073-1] c32 N74-23449
- SILICONIZING**
- Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
- SILOXANES**
- Synthesis of siloxane containing epoxy polymers with low dielectric properties
[NASA-CASE-MFS-13994-1] c06 N71-11240
- Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XMP-02584] c06 N71-20905
- Synthesis of siloxane containing epoxide and diamine polymers
[NASA-CASE-MFS-13994-2] c06 N72-25148
- Silphenylenesiloxane polymer with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151
- Fluid polydimethylsiloxane resin with low outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100
- SILVER**
- Dry electrode manufacture, using silver powder with cement
[NASA-CASE-FRC-10029-2] c05 N72-25121
- SILVER ALLOYS**
- Brazing alloy composition
[NASA-CASE-XMP-06053] c26 N75-27126
- SILVER CHLORIDES**
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
- SILVER COMPOUNDS**
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-MSC-10960-1] c03 N71-24718
- SILVER ZINC BATTERIES**
- Elimination of two step voltage discharge property of silver zinc batteries by using divalent silver oxide capacity of cell to charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
- SIMULATORS**
- Development of apparatus for simulating zero gravity conditions
[NASA-CASE-MPS-12750] c27 N71-16223
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
[NASA-CASE-NPO-10251] c10 N71-27365
- Simulator for practicing the mating of an observer-controlled object with a target
[NASA-CASE-MPS-23052-1] c09 N75-25965
- SINE SERIES**
- Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
- Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- SINE WAVES**
- Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
[NASA-CASE-NPO-10251] c10 N71-27365
- Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223
- Brushless electromechanical generator for sine and cosine functions
[NASA-CASE-LAR-11389-1] c09 N73-32121
- SINGLE CRYSTALS**
- Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-00158] c26 N70-36805
- Single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199
- Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054
- Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
- Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
- Method of crystallization --- for semiconductor materials used to manufacture electronic components
[NASA-CASE-MFS-23001-1] c76 N75-32928
- A method and apparatus for continuously processing a single crystalline ribbon in a reduced gravity environment
[NASA-CASE-MFS-23002-1] c76 N76-13934
- SINTERING**
- Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- SIZE (DIMENSIONS)**
- Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535

SIZE DETERMINATION

SUBJECT INDEX

SIZE DETERMINATION

Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282

SIZE SEPARATION

Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XMP-05114-2] c15 N71-26148

Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036

SIZING (SHAPING)

Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMP-05114] c15 N71-17650

SIZING SCREENS

Method for making screen with unlimited fineness of mesh and screen thickness
[NASA-CASE-XLE-00953] c15 N71-15966

Screen particle separator for soil samples
[NASA-CASE-XNP-09770-2] c15 N72-22483

SKEWBESS

Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420

Automatic character skew and spacing checking network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353

SKID LANDINGS

Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160

SKIN (ANATOMY)

Conditioning tanned sharkskin for use as abrasive resistant clothing
[NASA-CASE-XMS-09691-1] c18 N71-15545

Percutaneous connector device --- for transporting external electrical signals to internal body parts
[NASA-CASE-RSC-10849-1] c54 N76-19816

SKIN (STRUCTURAL MEMBER)

Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035

SKIN TEMPERATURE (BIOLOGY)

Thermistor holder for skin temperature measurements
[NASA-CASE-ARC-10855-1] c52 N75-33642

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Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-IFR-03802] c33 N71-23085

SKIRTS

Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-MFS-20619] c28 N72-11708

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Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408

SLEEP

Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729

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Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMP-10040] c15 N71-22877

System for enhancing tool-exchange capabilities of a portable wrench
[NASA-CASE-MFS-22283-1] c37 N75-33395

SLENDER BODIES

Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540

SLIDING CONTACT

Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-XMP-04238] c09 N69-39734

Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XMP-01049] c15 N71-23049

SLIP CASTING

Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076

SLITS

Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620

Method of fabricating an object with a thin wall having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c15 N74-21059

SLOT ANTENNAS

Planar array circularly polarized antenna with wall slot excitation
[NASA-CASE-NPO-10301] c07 N72-11148

Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

Circularly polarized antenna with linearly polarized pair of elements
[NASA-CASE-ERC-10214] c09 N72-31235

Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c09 N74-20864

Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330

SLOTS

Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504

Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110

Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386

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Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382

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Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-XNP-01310] c33 N71-28852

Smokestack mounted airfoil
[NASA-CASE-LAR-11669-1] c34 N76-13419

Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656

SMOKE TRAILS

Smoke generator
[NASA-CASE-ARC-10905-1] c31 N75-33278

SODIUM CHLORIDES

Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
[NASA-CASE-GSC-11214-1] c06 N73-13128

SOFT LANDING

Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861

Spacecraft shock absorbing system for soft landings
[NASA-CASE-XMP-02108] c31 N70-36845

Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085

SOFT LANDING SPACECRAFT

Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMP-03856] c31 N70-34159

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Auger-type soil penetrometer for burrowing into soil formations
[NASA-CASE-XNP-05530] c14 N73-32321

SOILS

Screen particle separator for soil samples
[NASA-CASE-XNP-09770-2] c15 N72-22483

Soil burrowing mole apparatus
[NASA-CASE-XNP-07169] c15 N73-32362

SOLAR ACTIVITY

Radiometric measuring system for solar activity and atmospheric attenuation and emission

- [NASA-CASE-ERC-10276] c14 N73-26432
- SOLAR ARRAYS**
- Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874
- Electrical interconnection of unilluminated solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053
- Development of solar energy powered heliotrope assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637
- Method of making silicon solar cell array --- and mounting on flexible substrate
[NASA-CASE-LEW-11069-1] c03 N74-14784
- SOLAR CELLS**
- Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
- Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239
- Attitude control system for spacecraft based on conversion of incident solar radiation on movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855
- Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
- Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
- Modifying existing solar cells for temperature control
[NASA-CASE-NPO-10109] c03 N71-11049
- Solar battery with interconnecting means for plural cells
[NASA-CASE-XNP-06506] c03 N71-11050
- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-XNP-05821] c03 N71-11056
- Metal strip mounting arrangement for solar cell arrays on spacecraft
[NASA-CASE-XGS-01475] c03 N71-11058
- Conductor for connecting parallel cells into submodules in series to form solar cell matrix
[NASA-CASE-NPO-10821] c03 N71-19545
- Space erectable rollup solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
[NASA-CASE-NPO-10188] c03 N71-20273
- Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLE-04787] c03 N71-20492
- Fabrication of solar cell banks for attaching solar cells to base members or substrates
[NASA-CASE-XNP-00826] c03 N71-20895
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
- Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
- Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
- Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449
- Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells
[NASA-CASE-XLE-02798] c26 N71-23654
- Method of attaching cover glass to silicon solar cell without using adhesive
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Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491
- Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MFS-21441-1] c14 N73-30392
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c14 N74-15091
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c14 N74-32890
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
Frequency scanning particle size spectrometer
[NASA-CASE-NPO-13606-1] c35 N75-19627
Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
- SPECTROPHOTOMETERS**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
Particle size spectrometer and refractometer
[NASA-CASE-NPO-13614-1] c35 N75-19628
High resolution Fourier interferometer-spectropolarimeter
[NASA-CASE-NPO-13604-1] c35 N75-22688
- SPECTROSCOPIC ANALYSIS**
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[NASA-CASE-XGS-08269] c23 N71-26206
- SPECTRUM ANALYSIS**
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[NASA-CASE-XNP-04161] c14 N71-15599
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[NASA-CASE-XNP-02039] c15 N71-15871
Method and apparatus for high resolution power spectrum analysis
[NASA-CASE-NPO-10748] c08 N72-20177
Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c71 N75-13593
- SPEECH RECOGNITION**
Speech analyzer --- which provides information regarding amplitude, frequency, and phase of a speech waveform
[NASA-CASE-GSC-11898-1] c32 N75-22563
- SPEED CONTROL**
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[NASA-CASE-XNP-06892] c09 N71-24805
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c15 N74-23070
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[NASA-CASE-MFS-14610] c09 N71-28886
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[NASA-CASE-XNP-09572] c14 N71-15621
Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
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Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
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[NASA-CASE-XLA-06683] c14 N72-28436
- SPHERICAL TANKS**
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- spherical shock waves
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[NASA-CASE-XLA-00679] c15 N70-38601
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[NASA-CASE-XGS-00619] c30 N70-40016
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[NASA-CASE-XLA-02132] c31 N71-10582
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[NASA-CASE-XMP-00442] c31 N71-10747
- SPIN STABILIZATION**
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[NASA-CASE-XLA-01989] c21 N70-34295
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
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[NASA-CASE-GSC-11479-1] c21 N74-28097
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[NASA-CASE-LAR-10753-1] c02 N74-30421
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[NASA-CASE-XMS-02383] c15 N71-15918
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[NASA-CASE-LEW-10326-3] c15 N74-10474
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[NASA-CASE-XAR-01547] c05 N69-21473
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[NASA-CASE-XMP-06589] c05 N71-23159
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Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c15 N74-13178
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[NASA-CASE-XMP-00392] c15 N70-34814
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[NASA-CASE-LAR-11072-1] c15 N73-20535
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[NASA-CASE-XLE-01604-2] c15 N71-15610
- Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
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[NASA-CASE-GSC-11163-1] c15 N73-32360
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[NASA-CASE-XLE-00037] c28 N70-33372
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[NASA-CASE-XFP-07658-1] c05 N71-26293
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[NASA-CASE-XLE-00027] c33 N71-29152
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[NASA-CASE-LEW-11981-1] c37 N76-20486
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- SPREADING**
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[NASA-CASE-XMP-02107] c15 N71-10809
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[NASA-CASE-XNP-09452] c15 N69-27504
Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XNP-00840] c15 N70-38225
Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391
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[NASA-CASE-ARC-10898-1] c37 N76-11441
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[NASA-CASE-ERC-10120] c26 N69-33482
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[NASA-CASE-PRC-10019] c15 N73-12487
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[NASA-CASE-LEW-11646-1] c28 N74-31269
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[NASA-CASE-NPO-13345-1] c37 N75-19684
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[NASA-CASE-XNP-01306-2] c09 N71-24596
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[NASA-CASE-XGS-01971] c15 N71-15922
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[NASA-CASE-XMS-03252] c15 N71-10658
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[NASA-CASE-XMP-00641] c31 N70-36410
- Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
- Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
- Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-NSC-12393-1] c02 N73-26006
- Externally supported internally stabilized flexible duct joint
[NASA-CASE-MPS-19194-1] c37 N76-14460
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[NASA-CASE-XMS-05562-1] c09 N69-39986
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[NASA-CASE-MPS-21675-1] c33 N74-33378
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[NASA-CASE-XLA-02854] c15 N69-27490
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[NASA-CASE-XLA-00791] c03 N70-39930
- Space vehicle stage coupling and quick release separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679
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[NASA-CASE-XLA-02132] c31 N71-10582
- Payload/spent rocket engine case separation system
[NASA-CASE-XLA-05369] c31 N71-15687
- Separation mechanism for use between stages of multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874
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[NASA-CASE-XLA-04804] c31 N71-23008
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[NASA-CASE-XKS-04631] c10 N71-23663
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[NASA-CASE-MSC-11849-1] c15 N72-22488
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[NASA-CASE-XPR-02007] c12 N71-24692
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Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- STAINING**
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[NASA-CASE-LAR-11649-1] c51 N76-13725
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[NASA-CASE-MPS-07369] c15 N71-20443
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- Method of forming a wick for a heat pipe
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[NASA-CASE-XNP-01307] c21 N70-41856
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- Photonmultiplier detector of Canopus for spacecraft attitude control
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- Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
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[NASA-CASE-NPO-11253] c09 N72-17157
- Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630
- Production method of star tracking reticles for transmitting in visible and near ultraviolet regions
[NASA-CASE-GSC-11188-1] c14 N73-32320
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[NASA-CASE-ARC-10716-1] c31 N73-32784
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[NASA-CASE-XNP-01058] c09 N71-12540
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[NASA-CASE-NPO-13374-1] c33 N75-19524
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[NASA-CASE-XNP-08680] c14 N71-22995
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[NASA-CASE-GSC-11893-1] c09 N75-25966
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[NASA-CASE-XMP-00663] c08 N71-18752
- Development and characteristics of oscillating static inverter
[NASA-CASE-IGS-05289] c09 N71-19470
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[NASA-CASE-XLE-01481] c14 N71-10781
- Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
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[NASA-CASE-XLA-00481] c14 N70-36824
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[NASA-CASE-XLA-00128] c15 N70-37925
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STATIONKEEPING

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[NASA-CASE-MPS-21108-1] c14 N74-27861

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[NASA-CASE-GSC-11446-1] c09 N74-20860

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STELLAR SPECTRA
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[NASA-CASE-XNP-06510] c14 N71-23797

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[NASA-CASE-MSC-12616-1] c07 N74-32601

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[NASA-CASE-NPO-13613-1] c37 N75-22747

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[NASA-CASE-XGS-02631] c03 N71-23006

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[NASA-CASE-XGS-01674] c03 N71-29129

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[NASA-CASE-LEW-12220-1] c44 N75-32586

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[NASA-CASE-XNP-00612] c11 N70-38182
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[NASA-CASE-XNP-02392] c32 N71-24285

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[NASA-CASE-XLA-00492] c14 N70-34799
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[NASA-CASE-XMS-05936] c14 N70-41682

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[NASA-CASE-MPS-12827] c14 N71-17656

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[NASA-CASE-XLE-00023] c15 N70-33330
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[NASA-CASE-XMP-00456] c14 N70-34705
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[NASA-CASE-XNP-09205] c14 N71-17657
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[NASA-CASE-XMP-04680] c15 N71-19489
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[NASA-CASE-XGS-04478] c14 N71-24233
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[NASA-CASE-XLA-04555-1] c14 N71-25892
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[NASA-CASE-MPS-20506-1] c35 N75-12273
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[NASA-CASE-XGS-08259] c14 N71-23698
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Development and characteristics of rescue litter with inflatable flotation device for water rescue application
[NASA-CASE-XMS-04170] c05 N71-22748
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMF-06589] c05 N71-23159

STRETCHING
Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457

STRINGS
Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623

STRUCTURAL DESIGN
Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XMS-00863] c05 N70-34857
Structural design of high pressure regulator valve
[NASA-CASE-XNP-00710] c15 N71-10778
Graphic illustration of lifting body design
[NASA-CASE-FRC-10063] c01 N71-12217
Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315

STRUCTURAL MEMBERS
Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XNP-02029] c14 N70-41955
Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
Universal joints for connecting two displaced shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
Fabrication of light weight panel structure using pairs of elongate hollow ribs of semicircular configuration
[NASA-CASE-LAR-11052-1] c32 N73-13929
Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
Method of laminating structural members
[NASA-CASE-XLA-11028-1] c18 N74-27035
Poling structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040
Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264

STRUCTURAL STABILITY
Latching device
[NASA-CASE-MPS-21606-1] c37 N75-19685

STRUCTURAL VIBRATION
Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MPS-14741] c09 N70-20737
Determining sway of buildings by low frequency device using pendulum
[NASA-CASE-XMF-00479] c14 N70-34794
Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428

STRUCTURES
Deformation measuring apparatus with feedback control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681

STRUTS
Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176

STUDS (STRUCTURAL MEMBERS)
Design of quick release locking pin for joining two or more load-carrying structural members
[NASA-CASE-MPS-18495] c15 N72-11385
Tool for mounting and removing studs with adhesive coated head portion
[NASA-CASE-MPS-20299] c15 N72-11392
Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MPS-21485-1] c15 N74-25968

SUBLIMATION
Tubular sublimator/evaporator heat sink
[NASA-CASE-ARC-10912-1] c44 N76-13599

SUBMINIATURIZATION
Micromicroampere current measuring circuit, with two subminiature thermionic diodes with

SUBREFLECTORS

SUBJECT INDEX

- filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
- SUBREFLECTORS**
Dish antenna having switchable beamwidth ---
with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516
- SUBSONIC SPEED**
Aerospace vehicle with variable planform for
hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
Construction of leading edges of surfaces for
aerial vehicles performing from subsonic to
above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
Variable dihedral shuttle orbiter --- for flight
at hypersonic and subsonic speeds
[NASA-CASE-LAR-10706-1] c18 N75-16613
- SUBSONIC WIND TUNNELS**
Variable geometry wind tunnel for testing
aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
- SUBSTRATES**
Means and methods of depositing thin films on
substrates
[NASA-CASE-XNP-00595] c15 N70-34967
Fabrication of solar cell banks for attaching
solar cells to base members or substrates
[NASA-CASE-XNP-00826] c03 N71-20895
Method and apparatus for fabricating solar cell
panels
[NASA-CASE-XNP-03413] c03 N71-26726
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dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-1] c27 N75-26136
Low cost substrates for polycrystalline solar
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[NASA-CASE-GSC-12022-1] c44 N76-13597
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Supporting structure for simultaneous exposure
of pellets to X rays
[NASA-CASE-XNP-06031] c15 N71-15606
- SULFATES**
Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469
- SULFONES**
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- SULFUR COMPOUNDS**
Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- SULFUR DIOXIDES**
Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- SUM RULES**
Describing circuit for obtaining sum of squares
of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
- SUNGLASSES**
Pliable frame for sunglasses in emergency
survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUNLIGHT**
Illumination system design for use as sunlight
simulator in space environment simulators with
multiple light sources reflected to single
virtual source
[NASA-CASE-HQN-10781] c23 N71-30292
- SUPERCONDUCTING MAGNETS**
Cryogenic flux-gated magnetometer using
superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
Improved alternator with windings of
superconducting materials acting as permanent
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[NASA-CASE-XLE-02824] c03 N69-39890
Segmented superconducting magnet producing
staggered magnetic field and suitable for
broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
Operating properties of superconducting magnet
in vacuum environment
[NASA-CASE-XNP-06503] c23 N71-29049
Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
- SUPERCONDUCTIVITY**
Superconducting alternator design with cryogenic
fluid for cooling windings below critical
temperature
[NASA-CASE-XLE-02823] c09 N71-23443
Superconductive resonant cavity for improved
signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
Superconducting magnetic field trapping device
for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
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sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332
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Superconductive accelerometer employing variable
force principle to determine acceleration of
bodies
[NASA-CASE-XMP-01099] c14 N71-15969
Controlled diffusion reaction process for
masking substrate of twisted multifilament
superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
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windings
[NASA-CASE-LEW-11015] c26 N73-32571
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aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
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for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011
Development and characteristics of variable
sweep wing control system for supersonic
aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
Development and characteristics of translating
horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
Design of supersonic aircraft with novel fixed,
swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
Absorptive, nonreflecting barrier mounted
between closely spaced jet engines on
supersonic aircraft, for preventing shock wave
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[NASA-CASE-XLA-02865] c28 N71-15563
Single wing supersonic aircraft --- with pivotal
attachment of airfoil
[NASA-CASE-ARC-10470-3] c01 N74-30414
- SUPERSONIC COMBUSTION**
Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c28 N74-13502
- SUPERSONIC DRAG**
Bluff-shaped annular configuration for
supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
- SUPERSONIC FLIGHT**
Variable aspect ratio and variable sweep delta
wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
Supersonic or hypersonic vehicle control system
comprising elevons with hinge line sweep and
free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SUPERSONIC FLOW**
Optical sensing of supersonic flows by
correlating deflections in laser beams through
flow
[NASA-CASE-MPS-20642] c14 N72-21407
Stagnation pressure probe --- for measuring
pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c14 N74-32878
- SUPERSONIC INLETS**
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
Shock position sensor for supersonic inlets ---
measuring pressure in the throat of a
supersonic inlet
[NASA-CASE-LEW-11915-1] c35 N76-14431
- SUPERSONIC NOZZLES**
Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
Telescoping-spike supersonic nozzle for turbojet
or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
Electric arc heater with supersonic nozzle and
fixed arc length for use in high temperature

- wind tunnels
[NASA-CASE-IAC-01677] c09 N71-20816
- SUPERSONIC SPEEDS**
Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
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[NASA-CASE-LAR-11552-1] c35 N76-14429
- SUPERSONIC TRANSPORTS**
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
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[NASA-CASE-GSC-10087-1] c02 N71-19287
System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- SUPPORT SYSTEMS**
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMF-03248] c11 N71-10604
Supporting structure for simultaneous exposure of pellets to X rays
[NASA-CASE-XNP-06031] c15 N71-15606
Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
Hydrostatic bearing support
[NASA-CASE-LEW-11158-1] c37 N76-19440
- SUPPORTS**
Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMF-07587] c15 N71-18701
Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMF-07808] c15 N71-23812
Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740
Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
Base support for expansible and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
Optical mirror support system
[NASA-CASE-YER-07896-2] c23 N72-22673
Fixture for supporting articles during vibration tests comprising integral annular unit
[NASA-CASE-MFS-20523] c14 N72-27412
Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176
Method of making porous-conductive supports for electrodes --- by electroforming and stacking
- nickel foils
[NASA-CASE-GSC-11367-1] c03 N74-19692
Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c32 N74-27397
A mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c44 N76-18679
- SUPPRESSORS**
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
- SURFACE DEFECTS**
Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822
Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c14 N74-32879
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N75-22119
- SURFACE DIFFUSION**
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772
- SURFACE FINISHING**
Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487
Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MFS-20243] c23 N73-13662
Surface finishing --- particularly for use in smoothing irregularities on aluminum aircraft wings
[NASA-CASE-MSC-12631-1] c02 N75-23476
Solar cell surface treatment
[NASA-CASE-LEW-11330-1] c44 N76-14612
- SURFACE IONIZATION**
Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- SURFACE LAYERS**
Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739
Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c06 N74-19769
- SURFACE PROPERTIES**
Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c33 N74-15652
Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009
Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
Method and apparatus for neutralizing potentials induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N75-27265
Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N76-20959
- SURFACE REACTIONS**
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446
- SURFACE ROUGHNESS**
Roughness detector for recording surface pattern of irregularities
[NASA-CASE-XLA-00203] c14 N70-34161

- Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-XMP-00462] c14 N70-34298
- Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586
- SURFACE ROUGHNESS EFFECTS**
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XMP-04163] c02 N71-23007
- SURFACE VEHICLES**
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
- Self-propelled vehicle with wheel, track laying, and walking capability for exploratory expolaration
[NASA-CASE-NPO-11366] c11 N73-26238
- Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c16 N74-15145
- Recording apparatus
[NASA-CASE-LAR-11353-1] c14 N74-20020
- Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194
- SURFACE WAVES**
Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980
- Distributed feedback acoustic surface wave oscillator
[NASA-CASE-NPO-13673-1] c33 N75-32323
- SURFACES**
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176
- Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
- Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c14 N74-13129
- Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-1] c27 N76-13292
- SURGES**
Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- SURGICAL INSTRUMENTS**
Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
- Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640
- SURVIVAL EQUIPMENT**
Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
- Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- Pliable frame for sunglasses in emergency survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- SUSPENDING (HANGING)**
Parallel motion suspension device for measuring instruments
[NASA-CASE-XNP-01567] c15 N70-41310
- Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
- Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- SUSPENDING (MIXING)**
A 2 degree/90 degree laboratory scattering photometer
[NASA-CASE-GSC-12088-1] c35 N76-17369
- SWEAT COOLING**
Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c15 N74-32919
- SWEEP CIRCUITS**
Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- SWEEP EFFECT**
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SWELLING**
Para-benzoquinone dioxide and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- SWEPT WINGS**
Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
- SWIRLING**
Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
- Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665
- SWITCHES**
Switching mechanism with energy stored in coil spring
[NASA-CASE-IGS-00473] c03 N70-38713
- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
- Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
- SWITCHING CIRCUITS**
Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
- Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XMP-00517] c03 N70-34157
- High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
- Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032
- Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
- Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694
- Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
- Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864

- Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XMP-03934] c09 N71-22985
- Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271
- Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
- Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
- Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126
- Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925
- Current regulating voltage divider design with load current shunting
[NASA-CASE-MFS-20935] c09 N71-34212
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031
- Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243
- Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201
- Pressure operated electrical switch responsive to pressure decrease after pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
- Solid state switch for variable circuit switching
[NASA-CASE-NPO-10817-1] c08 N73-30135
- Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143
- High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c07 N74-22814
- The dc-to-dc converters employing staggered phase power switches with two loop control
[NASA-CASE-NPO-13512-1] c33 N75-15876
- Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429
- Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
- Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818
- SWITCHING THEORY**
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Magnetic tape head function switching system
[NASA-CASE-GSC-11956-1] c35 N75-25134
- SWIVELS**
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMP-07808] c15 N71-23812
- SYNCHRONISM**
- Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974
- Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
- Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-IGS-03632] c09 N71-23311
- Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
- System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577
- SYNCHRONIZED OSCILLATORS**
- Development of phase demodulation system with two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469
- Phase locked phase modulation system with voltage controlled oscillator for final phase linearity
[NASA-CASE-XNP-05382] c10 N71-23544
- Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
- SYNCHRONIZERS**
- Development and characteristics of burst synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448

- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
- Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c07 N74-20809
- Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c07 N74-20810
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- SYNCHRONOUS MOTORS**
- Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
- Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524
- SYNCHRONOUS SATELLITES**
- Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
- Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
- Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
- Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- SYNTHESIS**
- Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMP-08651] c06 N71-11236
- Preparation of ordered poly(arylenesiloxane)/polymers
[NASA-CASE-XMP-10753] c06 N71-11237
- Synthesis and chemical properties of imidazopyrrolone/amide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
- Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- SYNTHESIZERS**
- Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- SYNTHETIC FIBERS**
- Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
- Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
- Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
- SYNTHETIC RESINS**
- Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895
- SYSTEM FAILURES**
- Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
- Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
- SYSTEMS ANALYSIS**
- Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
- SYSTEMS ENGINEERING**
- Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
- Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
- Solar battery with interconnecting means for plural cells
[NASA-CASE-XNP-06506] c03 N71-11050
- Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
- Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
- Method and apparatus for measuring potentials in plasmas
[NASA-CASE-XLE-00821] c25 N71-15650
- Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
- Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
- Wide range analog data compression system
[NASA-CASE-IGS-02612] c08 N71-19435
- Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
- Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
- Spatter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XMP-06065] c15 N71-20395
- Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
- Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
- Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XMP-03212] c15 N71-22721
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMP-01083] c15 N71-22723
- Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969
- Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
- Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-XMS-02930] c11 N71-23042

- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
- Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
- Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
- Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
- Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840
- Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841
- Broadband modified turnstile antenna for use in space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842
- Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMF-06617] c09 N71-24843
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
- Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
- Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787
- Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788
- Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NPO-10778] c14 N72-11364
- Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031
- Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
- Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQN-10439] c21 N72-21624
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
- Development of computer program for estimating reliability of self-repair and fault-tolerant systems with respect to selected system and mission parameters
[NASA-CASE-NPO-13086-1] c15 N73-12495
- Design and development of active control system for air cushion vehicle to reduce or eliminate effects of excessive vertical vibratory acceleration
[NASA-CASE-LAR-10531-1] c02 N73-13023
- Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386
- Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
- System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c14 N74-13132
- Three mirror glancing incidence system for X-ray telescope
[NASA-CASE-MFS-21372-1] c14 N74-27866
- Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124

T

TACHOMETERS

- Digital cardi tachometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
- Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
- Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473
- Tachometer
[NASA-CASE-MFS-23175-1] c35 N76-19409

TAKEOFF

- Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
- Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

TANGENTS

- Integrated circuit tangnet function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230

TANK GEOMETRY

- Liquid propellant tank design with senuitoroidal bulkhead
[NASA-CASE-XNP-01899] c31 N70-41948

TANKS (CONTAINERS)

- Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348
- Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XMF-02392] c32 N71-24285
- Design and development of device to prevent clogging in hoppers containing particulate materials
[NASA-CASE-LAR-10961-1] c15 N73-12496
- Floating baffle for tank drain
[NASA-CASE-KSC-10639] c15 N73-26472
- Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c36 N75-15029

TANTALUM

- Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes
[NASA-CASE-NPO-11138] c03 N70-34646
- Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLE-04788] c09 N71-22987
- Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808
- Tantalum modified ferritic iron base alloys --- for use in high temperature environments
[NASA-CASE-LEW-12095-1] c26 N76-17233

TANTALUM ALLOYS

Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating

[NASA-CASE-XLA-03105] c15 N69-27483

TANTALUM OXIDES

Development of thin film temperature sensor from TaO

[NASA-CASE-NPO-11775] c26 N72-28761

TAPE RECORDERS

Plural recorder system which limits signal recording to signals of sufficient interest

[NASA-CASE-XMS-06949] c09 N69-21467

Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder

[NASA-CASE-XGS-01223] c07 N71-10609

Development of low friction magnetic recording tape

[NASA-CASE-XGS-00373] c23 N71-15978

Tape guidance system for multichannel digital recording system

[NASA-CASE-XNP-09453] c08 N71-19420

Design and development of synchronous servo loop control system

[NASA-CASE-XNP-03744] c10 N71-20448

Development of data storage system for storing digital data in high density format on magnetic tape

[NASA-CASE-XNP-02778] c08 N71-22710

Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback

[NASA-CASE-XGS-01812] c07 N71-23001

Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions

[NASA-CASE-XGS-08259] c14 N71-23698

Transient video signal tape recorder with expanded playback

[NASA-CASE-ARC-10003-1] c09 N71-25866

Closed loop servosystem for variable speed tape recorders onboard spacecraft

[NASA-CASE-NPO-10700] c07 N71-33613

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios

[NASA-CASE-ERC-10112] c07 N72-21119

Video tape recorder with scan conversion playback for color television signals

[NASA-CASE-NPO-10166-1] c07 N73-22076

Recording apparatus

[NASA-CASE-LAR-11353-1] c14 N74-20020

Magnetic tape head function switching system

[NASA-CASE-GSC-11956-1] c35 N75-25134

Method of and means for testing a tape record/playback system

[NASA-CASE-MFS-22671-2] c35 N75-31418

Scan converting video tape recorder

[NASA-CASE-NPO-10166-2] c35 N76-16391

TAPERED COLUMNS

Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section

[NASA-CASE-XLE-00409] c28 N71-15658

Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements

[NASA-CASE-XLE-05689] c28 N71-15659

TARGET ACQUISITION

Acquisition and tracking system for optical radar

[NASA-CASE-MFS-20125] c16 N72-13437

Target acquisition antenna feed with reflector system

[NASA-CASE-GSC-10064-1] c10 N72-22235

Development of electronic detection system for remotely determining number and movement of enemy personnel

[NASA-CASE-ARC-10097-2] c07 N73-25160

TARGET RECOGNITION

Electronic background suppression field scanning sensor for detecting point source targets

[NASA-CASE-XGS-05211] c07 N69-39980

TARGETS

Simulator for practicing the mating of an observer-controlled object with a target

[NASA-CASE-MFS-23052-1] c09 N75-25965

TEFLON (TRADEMARK)

Reinforced PEP Teflon composite material diffusion bonded to metal substrate

[NASA-CASE-MFS-20482] c15 N72-22492

Method of producing a storage bulb for an atomic hydrogen maser

[NASA-CASE-NPO-13050-1] c36 N75-15029

TELECOMMUNICATION

Adaptive compression signal processor for PCM communication systems

[NASA-CASE-XLA-03076] c07 N71-11266

Circuitry for generating sync signals in FM communication systems including video information

[NASA-CASE-XNP-10830] c07 N71-11281

Automatic estimation of signal to noise ratio and other parameters in signal communication systems

[NASA-CASE-XNP-05254] c07 N71-20791

Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system

[NASA-CASE-NPO-10851] c07 N71-24613

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes

[NASA-CASE-NPO-10595] c10 N71-25917

Multicarrier communications system for transmitting modulated signals from single transmitter

[NASA-CASE-NPO-11548] c07 N73-26118

Synchronized digital communication system

[NASA-CASE-XNP-03623] c09 N73-28084

Coherent receiver employing nonlinear coherence detection for carrier tracking

[NASA-CASE-NPO-11921-1] c07 N74-30523

Pseudo-noise test set for communication system evaluation --- test signals

[NASA-CASE-MFS-22671-1] c35 N75-21582

Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems

[NASA-CASE-GSC-11743-1] c32 N75-24981

TELEMETRY

Fabrication of pressure-telemetry transducers

[NASA-CASE-XNP-09752] c14 N69-21541

Telemetry data unit to form multibit words for use between demodulator and computer

[NASA-CASE-XNP-09225] c09 N69-24333

Development of telemetry system for position location and data acquisition

[NASA-CASE-GSC-10083-1] c30 N71-16090

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities

[NASA-CASE-XLA-03273] c14 N71-18699

Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems

[NASA-CASE-XGS-02317] c09 N71-23525

Time division multiplexed telemetry transmitting system controlled by programmed memory

[NASA-CASE-GSC-10131-1] c07 N71-24624

Temperature telemetric transmitter with frequency determining tank circuit for short range transmission

[NASA-CASE-NPO-10649] c07 N71-24840

System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes

[NASA-CASE-NPO-10214] c10 N71-26577

Zero power telemetry actuated switch for biomedical equipment

[NASA-CASE-ARC-10105] c09 N72-17153

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station

[NASA-CASE-NPO-11358] c07 N72-25172

Control and information system for digital telemetry data using analog converter to digitize sensed parameter values

[NASA-CASE-NPO-11016] c08 N72-31226

Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication

[NASA-CASE-NPO-11572] c07 N73-16121

Telemetry and transmission system with programmed sampling and multiplexing

[NASA-CASE-GSC-11388-1] c07 N73-24187

- Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012
- Accelerometer telemetry system --- for monitoring motor responses
[NASA-CASE-ARC-10849-1] c35 N75-20685
- TELEOPERATORS**
- Cooperative multiaxis sensor for teleoperation of article manipulating apparatus
[NASA-CASE-NPO-13386-1] c54 N75-27758
- TELEPHONY**
- Digital communication system
[NASA-CASE-MSC-13912-1] c07 N74-30524
- TELESCOPES**
- Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
- Development of reflector system for application to line-of-sight pointing and tracking telescopes
[NASA-CASE-NPO-10468] c23 N71-33229
- Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409
- Borescope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452
- Ritchey-Chretien telescope responsive to images located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393
- Servo-controlled intravitral microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123
- TELETYPEWRITER SYSTEMS**
- Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
- TELEVISION CAMERAS**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
- TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
- Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XMP-06092] c07 N71-24612
- Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109
- Optical conversion method
[NASA-CASE-MSC-12618-1] c74 N76-18917
- TELEVISION EQUIPMENT**
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
- Rotating raster generator
[NASA-CASE-FRC-10071-1] c07 N74-20813
- Auditory display for the blind
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[NASA-CASE-ERC-10552] c09 N71-12539
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[NASA-CASE-MFS-21040-1] c06 N73-30098
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[NASA-CASE-XAC-00435] c09 N70-35440
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[NASA-CASE-XGS-00458] c09 N70-38604
- Matched thermistors for microwave power meters with compensation for temperature changes
[NASA-CASE-NPO-10348] c10 N71-12554
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[NASA-CASE-XGS-02319] c14 N71-22965
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[NASA-CASE-XNP-03916] c09 N71-28810
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[NASA-CASE-HQN-10780] c14 N71-30265
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[NASA-CASE-MFS-20433] c15 N72-28496
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[NASA-CASE-ERC-10187] c16 N69-31343
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[NASA-CASE-NPO-10109] c03 N71-11049
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[NASA-CASE-XLA-01926] c14 N71-15620
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[NASA-CASE-XNP-00920] c15 N71-15906
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[NASA-CASE-NPO-10138] c33 N71-16357

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[NASA-CASE-XLA-01243] c33 N71-22792

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[NASA-CASE-XLA-07728] c33 N71-22890

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[NASA-CASE-INP-05524] c33 N71-24876

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[NASA-CASE-MSC-13917-1] c05 N72-15098

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[NASA-CASE-NPO-10633] c03 N72-28025

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[NASA-CASE-HQN-10654-1] c16 N73-13489

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[NASA-CASE-ARC-10599-1] c05 N73-26071

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[NASA-CASE-NPO-11304] c14 N73-26430

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temperature within spacecraft module with wide
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[NASA-CASE-GSC-11018-1] c31 N73-30829

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Time division multiplexer with magnetic latching relays
[NASA-CASE-XNP-00431] c09 N70-38998
Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622
Time division multiplexed telemetry transmitting system controlled by programmed memory
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[NASA-CASE-XNP-01383] c09 N71-10659

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Minimum time delay unit for conventional time multiplexed data compression channels
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[NASA-CASE-NPO-11203] c10 N72-20224
Automatic transponder --- measurement of the internal delay time of a transponder
[NASA-CASE-GSC-12075-1] c32 N76-19318

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Mechanism for measuring nanosecond time differences between luminous events using streak camera
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[NASA-CASE-XNP-01056] c14 N71-23041

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Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240

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Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507

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[NASA-CASE-XMS-04061-1] c09 N69-39885
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[NASA-CASE-XNP-08875] c10 N71-23099
Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
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[NASA-CASE-XNP-03744] c10 N71-20448
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[NASA-CASE-XNP-08875] c10 N71-23099
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[NASA-CASE-NPO-12107] c08 N71-27255
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[NASA-CASE-XLA-03135] c32 N71-16428

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[NASA-CASE-NPO-11078] c09 N72-25262

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[NASA-CASE-NPO-11966-1] c09 N74-17928

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[NASA-CASE-MFS-22560-1] c33 N75-26251

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Deployable cantilever support for deploying
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[NASA-CASE-NPO-10883] c31 N72-22874

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with special steering and triggering circuits
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[NASA-CASE-LAR-10439-1] c33 N73-27796

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[NASA-CASE-NPO-10679] c15 N72-21462

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[NASA-CASE-MFS-20068] c07 N71-27191

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[NASA-CASE-MSC-13201-1] c07 N71-28429

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Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- VEHICLE WHEELS**
Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MFS-20400] c31 N71-18611
Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles
[NASA-CASE-MFS-13929] c15 N71-27091
Omnidirectional wheel
[NASA-CASE-MFS-21309-1] c15 N74-18125
Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c15 N74-23070
An improved fifth wheel
[NASA-CASE-PRC-10081-1] c37 N75-29432
- VELOCITY**
Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895
- VELOCITY MEASUREMENT**
-Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
Superconductive accelerometer employing variable force principle to determine acceleration of bodies
[NASA-CASE-XMF-01099] c14 N71-15969
Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XMF-05844] c14 N71-17587
Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410
Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-HQN-10740-1] c24 N74-19310
Tachometer
[NASA-CASE-MFS-23175-1] c35 N76-19409
- VELOCITY MODULATION**
Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777
Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627
- VENTILATORS**
Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761
- VENTING**
Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
Solid propellant rocket engine with venting system to control effective nozzle throat area
[NASA-CASE-XNP-03282] c28 N72-20758
- VENUS (PLANET)**
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675
- VERTICAL FLIGHT**
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157
- VERTICAL LANDING**
Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XMF-01174] c02 N70-41589
- VERTICAL TAKEOFF AIRCRAFT**
Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-YAC-08972] c02 N71-20570
- VERY HIGH FREQUENCIES**
VHP/UHF parasitic probe antenna for spacecraft

- communication
[NASA-CASE-XKS-09340] c07 N71-24614
- VESTS**
Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- VIBRATION**
Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
Vibration control of flexible bodies in steady accelerating environment
[NASA-CASE-LAR-10106-1] c15 N71-27169
- VIBRATION DAMPING**
Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
Digital filter for reducing jitter in digital control systems
[NASA-CASE-NPO-11088] c08 N71-29034
Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- VIBRATION EFFECTS**
Electromagnetic energy detection by thermal sensor with vibrating electrode
[NASA-CASE-XAC-10768] c09 N71-18830
Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514
Development of optical system for detecting defective components in rotating machinery with emphasis on bearing assemblies
[NASA-CASE-KSC-10752-1] c15 N73-27407
- VIBRATION ISOLATORS**
Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486
Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391
Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MPS-21680-1] c32 N74-27397
Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573
- VIBRATION MEASUREMENT**
Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-ARC-10154-1] c14 N72-22440
Recording apparatus
[NASA-CASE-LAR-11353-1] c14 N74-20020
Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XMP-05882] c35 N75-27329
- VIBRATION METERS**
Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMP-02433] c14 N71-10616
- VIBRATION MODE**
Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- VIBRATION SIMULATORS**
Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
- VIBRATION TESTS**
Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185
Fixture for supporting articles during vibration tests comprising integral annular unit
[NASA-CASE-MPS-20523] c14 N72-27412
Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
Multi-axis vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-MPS-20242] c14 N73-19421
- VIBRATIONAL SPECTRA**
Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- VIDEO COMMUNICATION**
Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
Monitoring circuit design for sampling-circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
- VIDEO DATA**
TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866
Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
- VIDEO EQUIPMENT**
Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
Video signal enhancement of signal component representing brightness of scene element in low contrast
[NASA-CASE-NPO-10343] c07 N71-27341
Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NPO-10199] c09 N72-17156
Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NPO-10166-1] c07 N73-22076
Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391
Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- VIDICONS**
Operation of vidicon tube for scanning spatial charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- VINYL POLYMERS**
Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698
- VINYLDENE**
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500
- VISCOELASTICITY**
Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161

- Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429
- Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573
- VISCOMETERS**
Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials:
[NASA-CASE-XNP-09462] c14 N71-17584
- Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429
- VISCOSITY**
Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
- VISCOUS DAMPING**
Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486
- Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
- Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- VISIBILITY**
Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748
- VISORS**
Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MS-C-13530-2] c23 N75-14834
- VISUAL ACUITY**
Multiparameter vision testing apparatus
[NASA-CASE-MS-C-13601-2] c54 N75-27759
- VISUAL AIDS**
Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N76-20959
- VISUAL CONTROL**
Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
- VISUAL FIELDS**
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
- VISUAL PERCEPTION**
High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
- VISUAL STIMULI**
Reaction tester for testing reaction to light stimuli
[NASA-CASE-MS-C-13604-1] c05 N73-13114
- VOICE**
Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c71 N75-13593
- VOICE COMMUNICATION**
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
- Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621
- Voice operated receiving and transmitting system for use in protective suits
[NASA-CASE-KSC-10164] c07 N71-33108
- Technique for recovery of voice data from heat damaged magnetic tape
[NASA-CASE-XLE-14219-1] c07 N74-27612
- Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MFS-22729-1] c32 N76-21366
- VOICE DATA PROCESSING**
Digital communication system
[NASA-CASE-MS-C-13912-1] c07 N74-30524
- VOIDS**
Improved bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N76-13267
- VOLATILITY**
Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607
- VOLT-AMPERE CHARACTERISTICS**
Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
- VOLTAGE AMPLIFIERS**
Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
- Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
- RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172
- Wide range analog to digital converter with variable gain amplifier
[NASA-CASE-NPO-11018] c08 N72-21200
- VOLTAGE CONVERTERS (DC TO DC)**
Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c09 N74-11049
- The dc-to-dc converters employing staggered phase power switches with two loop control
[NASA-CASE-NPO-13512-1] c33 N75-15876
- VOLTAGE GENERATORS**
Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MS-C-13112] c03 N71-11057
- Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252
- VOLTAGE REGULATORS**
Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
- Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
- Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
- Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
- Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449
- High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
- Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543
- Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
- Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26085
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
- Dissipative voltage regulator system for minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626
- Power point tracker for maintaining optimal output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407

VOLTAGE

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- Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NPO-11031] c07 N71-33606
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243
- Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252
- Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c09 N74-11049
- Overvoltage protection network
[NASA-CASE-ARC-10197-1] c09 N74-17929
- Low distortion automatic phase control circuit --- voltage controlled phase shifter.
[NASA-CASE-MFS-21671-1] c10 N74-22885
- The dc-to-dc converters employing staggered phase power switches with two loop control
[NASA-CASE-NPO-13512-1] c33 N75-15876
- Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521
- VOLTMETERS**
Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521
- VOMITING**
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
- VORTEX BREAKDOWN**
Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N74-26456
- VORTEX GENERATORS**
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[NASA-CASE-XMP-04709] c15 N71-15609
- Smokestack mounted airfoil
[NASA-CASE-LAR-11669-1] c34 N76-13419
- VORTICES**
Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N74-26456
- VULCANIZING**
Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article.
[NASA-CASE-LAR-10489-1] c15 N74-18124
- W**
- WAFERS**
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[NASA-CASE-ERC-10138] c26 N71-14354
- WALL TEMPERATURE**
Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417
- Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
- WALLS**
Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
- WARNING SYSTEMS**
Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
- Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
- Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XMP-03968] c14 N71-27186
- Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
- Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
- Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643
- Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
- Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205
- Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641
- Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c14 N74-18090
- WASTE DISPOSAL**
Fecal waste disposal container
[NASA-CASE-XMS-06761] c05 N69-23192
- Airlock for waste transferal from pressurized enclosure aboard space vehicle to waste receiver at negative pressure
[NASA-CASE-MFS-20922] c31 N72-20840
- Pressurized tank for feeding liquid waste into processing equipment
[NASA-CASE-LAR-10365-1] c05 N72-27102
- Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] c05 N74-20725
- Airlock
[NASA-CASE-MFS-20922-1] c15 N74-22136
- Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611
- Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
- WASTE ENERGY UTILIZATION**
Pyrolysis system and process --- recovering energy from solid wastes containing hydrocarbons
[NASA-CASE-MSC-12669-1] c44 N76-16621
- WATER**
Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842
- Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446
- Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N76-18680
- Solar hydrogen generator --- to decompose water into H₂ and O₂
[NASA-CASE-LAR-11361-1] c44 N76-19564
- WATER FLOW**
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[NASA-CASE-MFS-21115-1] c05 N74-12779
- Solar powered pump
[NASA-CASE-NPO-13567-1] c37 N75-22746
- WATER INJECTION**
Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
[NASA-CASE-XLA-01552] c07 N71-11284
- WATER LANDING**
Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
- WATER MANAGEMENT**
Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-MSC-10960-1] c03 N71-24718
- WATER POLLUTION**
Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086
- Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413

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WEIGHT (MASS)

WATER RECLAMATION
 Potable water reclamation from human wastes in zero-G environment
 [NASA-CASE-XLA-03213] c05 N71-11207
 Iodine generator for reclaimed water purification
 [NASA-CASE-MSC-14632-1] c54 N75-25594

WATER TEMPERATURE
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 [NASA-CASE-XAC-00812] c14 N71-15598

WATER TREATMENT
 Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
 [NASA-CASE-MSC-10960-1] c03 N71-24718
 Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
 [NASA-CASE-ARC-10643-1] c25 N75-12087
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 [NASA-CASE-ARC-10643-2] c51 N75-13506
 Iodine generator for reclaimed water purification
 [NASA-CASE-MSC-14632-1] c54 N75-25594

WATER VAPOR
 Equipment for measuring partial water vapor pressure in gas tank
 [NASA-CASE-XMS-01618] c14 N71-20741

WATERPROOFING
 Glass-to-metal seals comprising relatively high expansion metals
 [NASA-CASE-LEW-10698-1] c15 N74-21063

WAVE AMPLIFICATION
 Distributed feedback acoustic surface wave oscillator
 [NASA-CASE-NPO-13673-1] c33 N75-32323

WAVE FRONT RECONSTRUCTION
 Recording and reconstructing focused image holograms
 [NASA-CASE-ERC-10017] c16 N71-15567

WAVE GENERATION
 Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
 [NASA-CASE-XLA-00112] c11 N70-33287
 Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
 [NASA-CASE-XMS-01315] c09 N70-41675
 Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
 [NASA-CASE-NPO-10251] c10 N71-27365
 Wideband generator for producing sine wave quadrature and second harmonic of input signal
 [NASA-CASE-NPO-11133] c10 N72-20223
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 [NASA-CASE-NPO-13263-1] c12 N75-24774

WAVE REFLECTION
 Surface defect detection by reflected microwave radiation pattern
 [NASA-CASE-ARC-10009-1] c15 N71-17822
 Millimeter wave antenna system for spacecraft use
 [NASA-CASE-GSC-10949-1] c07 N71-28965

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 Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
 [NASA-CASE-MFS-20243] c23 N73-13662

WAVEFORMS
 Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
 [NASA-CASE-XGS-00131] c09 N70-38995
 Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
 [NASA-CASE-XNP-01383] c09 N71-10659
 Peak polarity selector for monitoring waveforms
 [NASA-CASE-FRC-10010] c10 N71-24862
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 [NASA-CASE-MSC-12395] c09 N72-25257
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 [NASA-CASE-GSC-11898-1] c32 N75-22563
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 [NASA-CASE-MSC-14557-1] c32 N76-16249

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 [NASA-CASE-NPO-10301] c07 N72-11148
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 [NASA-CASE-LAR-11084-1] c09 N73-12216

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 [NASA-CASE-NPO-11031] c07 N71-33606

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 [NASA-CASE-XNP-05219] c16 N71-15550
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 [NASA-CASE-ERC-10011] c07 N71-29065
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 [NASA-CASE-LAR-10513-1] c07 N72-25170
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 [NASA-CASE-LAR-10511-1] c09 N72-29172
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 [NASA-CASE-LAR-11352-1] c33 N75-26245
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 [NASA-CASE-NPO-13544-1] c36 N76-18428

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 [NASA-CASE-ERC-10187] c16 N69-31343
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 [NASA-CASE-XLE-00011] c14 N70-41946
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 [NASA-CASE-ERC-10248] c14 N72-17323
 Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
 [NASA-CASE-ERC-10174] c14 N72-25409
 Dual wavelength system for monitoring film deposition
 [NASA-CASE-MFS-20675] c26 N73-26751
 Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
 [NASA-CASE-ARC-10637-1] c35 N75-16783
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 [NASA-CASE-ARC-10370-1] c36 N75-31426

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 [NASA-CASE-NPO-13690-1] c27 N76-13294

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 [NASA-CASE-GSC-11902-1] c35 N75-22687

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 [NASA-CASE-GSC-12083-1] c36 N76-15451

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impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146

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[NASA-CASE-XLA-02605] c14 N71-10773
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[NASA-CASE-MFS-21556-1] c14 N74-26945

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Fluid mass sensor --- apparatus and method for measuring fluid mass in weightless condition
[NASA-CASE-MSC-14653-1] c35 N75-13218

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Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
Liquid-gas separator adapted for use in zero gravity environment-- drawings
[NASA-CASE-XMS-01624] c15 N70-40062
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[NASA-CASE-XMS-01546] c14 N70-40233
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[NASA-CASE-XNP-01390] c28 N70-41275
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[NASA-CASE-XMS-01492] c05 N70-41297
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[NASA-CASE-XLA-03213] c05 N71-11207
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[NASA-CASE-XLE-00586] c15 N71-15968
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[NASA-CASE-XLA-01787] c11 N71-16028
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[NASA-CASE-MFS-12750] c27 N71-16223
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[NASA-CASE-MFS-11132] c15 N71-17649
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[NASA-CASE-XMS-06236] c14 N71-21007
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[NASA-CASE-XMF-06515] c14 N71-23227
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[NASA-CASE-ARC-10100-1] c05 N71-24738
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[NASA-CASE-XNP-09770-3] c11 N71-27036
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[NASA-CASE-NPO-13462-1] c35 N75-16807
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[NASA-CASE-XAC-00319] c25 N70-41628
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[NASA-CASE-XLA-00939] c11 N71-15926
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[NASA-CASE-MFS-12915] c11 N71-17600
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[NASA-CASE-XAC-01677] c09 N71-20816
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[NASA-CASE-XNP-00250] c11 N71-28779
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[NASA-CASE-XLA-02081] c20 N71-16281
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[NASA-CASE-LEW-10433-1] c09 N72-22197
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[NASA-CASE-XLA-00087] c02 N70-33332
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[NASA-CASE-LAR-11645-1] c02 N74-26456
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[NASA-CASE-LAR-10574-1] c11 N73-13257
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[NASA-CASE-MSC-12631-1] c02 N75-23476
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[NASA-CASE-XLE-00020] c15 N70-33226
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[NASA-CASE-XLA-08911] c15 N71-27214
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[NASA-CASE-XLA-05966] c15 N72-12408
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[NASA-CASE-FRC-10038] c15 N72-20444
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[NASA-CASE-MFS-13687-2] c09 N72-22198
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[NASA-CASE-LEW-11015] c26 N73-32571

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[NASA-CASE-XNP-08961] c14 N71-24809

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[NASA-CASE-XMP-00341] c15 N70-33323
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[NASA-CASE-XLE-00953] c15 N71-15966

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[NASA-CASE-XMS-02383] c15 N71-15918
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[NASA-CASE-XLE-02823] c09 N71-23443
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[NASA-CASE-XGS-07805] c15 N72-33476

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Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205

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[NASA-CASE-MSC-15158-1] c14 N72-17325

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[NASA-CASE-XNP-04623] c10 N71-26103
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[NASA-CASE-XNP-01466] c10 N71-26434

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[NASA-CASE-MFS-20586] c15 N71-17686
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[NASA-CASE-MFS-22283-1] c37 N75-33395
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[NASA-CASE-NPO-13059-1] c37 N76-20480

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[NASA-CASE-MFS-20243] c23 N73-13662

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[NASA-CASE-MSC-14276-1] c54 N75-21948

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[NASA-CASE-MFS-21931-1] c37 N75-26372

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[NASA-CASE-MFS-21372-1] c14 N74-27866

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[NASA-CASE-XNP-06031] c15 N71-15606
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[NASA-CASE-MFS-22409-1] c16 N74-18153
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[NASA-CASE-HQN-10876-1] c35 N75-19621

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[NASA-CASE-XLA-08646] c14 N71-17586

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[NASA-CASE-XPR-00756] c02 N71-13421

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[NASA-CASE-LEW-10518-2] c24 N72-28714

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[NASA-CASE-ERC-10283] c16 N72-25485

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[NASA-CASE-GSC-11746-1] c36 N75-19654
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[NASA-CASE-GSC-11571-1] c36 N76-17384

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[NASA-CASE-XAC-01404] c05 N70-41581
Strapped down gyroscope aligned with sun and star tracker optical axis calibrating roll, yaw and pitch values
[NASA-CASE-ARC-10716-1] c31 N73-32784

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[NASA-CASE-LAR-11140-1] c02 N73-20008

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[NASA-CASE-XGS-00619] c30 N70-40016

Z

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[NASA-CASE-MFS-14711] c15 N71-26185
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[NASA-CASE-NPO-13532-1] c36 N75-15973

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[NASA-CASE-GSC-10361-1] c18 N72-23581
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[NASA-CASE-XMF-07770-2] c18 N71-26772

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mixture of aluminum oxide and zirconium oxide
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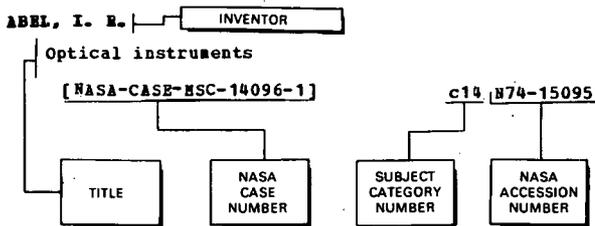
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NASA PATENT ABSTRACTS BIBLIOGRAPHY

JULY 1976

Section 2

Typical Inventor Index Listing



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A

- | | | | |
|--------------------|--|-------------------------|---------------|
| ABEL, I. E. | Optical instruments | | |
| | [NASA-CASE-HSC-14096-1] | | |
| | | TITLE | |
| | | NASA CASE NUMBER | |
| | | SUBJECT CATEGORY NUMBER | c14 N74-15095 |
| | | NASA ACCESSION NUMBER | |
| ABEL, I. E. | Optical instruments | | |
| | [NASA-CASE-HSC-14096-1] | | c14 N74-15095 |
| ABERNATHY, W. J. | Insert facing tool | | |
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| ABHYANKAR, K. D. | Interferometer-polarimeter | | |
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| ABSHIRE, J. B. | Polarization compensator for optical communications | | |
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CHEM, W.
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[NASA-CASE-ARC-10263-1] c14 N72-22438

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[NASA-CASE-XLA-00495] c14 N70-41332

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[NASA-CASE-ARC-10265-1] c10 N72-28240
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apparatus
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 [NASA-CASE-NPO-13643-1] c54 N75-25598
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 [NASA-CASE-XGS-00381] c09 N70-34819
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 detection for carrier tracking
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Varying density composite structure		[NASA-CASE-XLA-00806]	c02 N70-34858
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[NASA-CASE-MPS-21577-1]	c03 N74-29410	Wind tunnel airstream oscillating apparatus Patent	
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[NASA-CASE-GSC-10041-1]	c10 N71-19418	Variable stiffness polymeric damper	
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[NASA-CASE-XGS-05289]	c09 N71-19470	LOKERSON, D. C.	
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[NASA-CASE-MSC-14053-1]	c08 N74-12888	LONG, R. A.	
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[NASA-CASE-MSC-14683-1]	c74 N75-33835	[NASA-CASE-XMS-00370]	c17 N71-20941
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[NASA-CASE-XNP-06092]	c07 N71-24612	[NASA-CASE-LAR-10961-1]	c15 N73-12496
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[NASA-CASE-MPS-20809]	c23 N73-13660	Absolute focus lock for microscopes	
LISTER, J. L.		[NASA-CASE-LAR-10184]	c14 N72-22445
Thermally conductive polymers		LOOSE, J. D.	
[NASA-CASE-GSC-11304-1]	c06 N72-21105	Steady state thermal radiometers	
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Apparatus and method for separating a semiconductor wafer Patent		LOPEZ, A. E.	
[NASA-CASE-ERC-10138]	c26 N71-14354	Three-axis finger tip controller for switches Patent	
Method for detecting leaks in hermetically sealed containers Patent		[NASA-CASE-XAC-02405]	c09 N71-16089
[NASA-CASE-ERC-10045]	c15 N71-24910	LORD, B. C., III	
LITCHFORD, G. B.		Analysis of hydrogen-deuterium mixtures	
Altitude measuring system		[NASA-CASE-NPO-11322]	c06 N72-25146
[NASA-CASE-ERC-10412-1]	c09 N73-12211	LORELL, K. R.	
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Method of making pressure tight seal for super alloy		[NASA-CASE-XNP-04111]	c14 N71-15622
[NASA-CASE-LAR-10170-1]	c15 N74-11301	All sky pointing attitude control system	
LITTLEJOHN, D. P.		[NASA-CASE-ARC-10716-1]	c31 N73-32784
High power-high voltage waterload Patent		LOTHSCHUETZ, P. F.	
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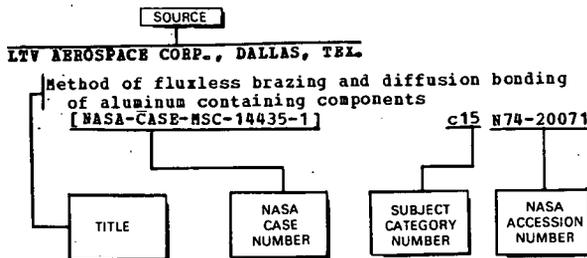
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[NASA-CASE-XMP-04132] c15 N69-27502
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[NASA-CASE-MSC-12669-1] c44 N76-16621
- CORNELL UNIV., ITHACA, N.Y.**
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[NASA-CASE-XGS-00740] c07 N71-23098
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- IIT RESEARCH INST., CHICAGO, ILL.**
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- IMAGE INFORMATION, INC., DANBURY, CONN.**
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- INCA ENGINEERING CORP., SAN GABRIEL, CALIF.**
Apparatus for establishing flow of a fluid mass having a known velocity
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- INSTITUTE FOR RESEARCH, INC., HOUSTON, TEX.**
Method of making a perspiration resistant biopotential electrode
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- INSTITUTE OF RESEARCH AND INSTRUMENTATION, HOUSTON, TEX.**
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- INTERNATIONAL BUSINESS MACHINES CORP., NEW YORK.**
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- Tool attachment for spreading loose elements away from work Patent
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- JET PROPULSION LAB., CALIF. INST. OF TECH., PASADENA.**
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- Solid state switch
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- Trifunctional alcohol
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- Coating process
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- Bi-metallic power controlled actuator
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- Piping arrangement through a double chamber structure
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- Micropacked column for a chromatographic system
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- Temperature sensitive capacitor device
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- Electro-optical scanning apparatus Patent Application
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Process for preparing sterile solid propellants Patent			

Means for controlling rupture of shock tube diaphragms Patent
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Insertion loss measuring apparatus having transformer means connected across a pair of bolometers Patent
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Parallel plate viscometer Patent
[NASA-CASE-XNP-09462] c14 N71-17584

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Interferometer direction sensor Patent
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Incremental motion drive system Patent
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[NASA-CASE-NPO-10175] c14 N71-18625

Magnetic core current steering commutator Patent
[NASA-CASE-NPO-10201] c08 N71-18694

Method of using photovoltaic cell using poly-N-vinylcarbazole complex Patent
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Electrical switching device Patent
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Roll-up solar array Patent
[NASA-CASE-NPO-10188] c03 N71-20273

Method and device for determining battery state of charge Patent
[NASA-CASE-NPO-10194] c03 N71-20407

Soil particles separator, collector and viewer Patent
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Transmission line thermal short Patent
[NASA-CASE-XNP-09775] c09 N71-20445

Synchronous servo loop control system Patent
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Processing for producing a sterilized instrument Patent
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Signal-to-noise ratio estimating by taking ratio of mean and standard deviation of integrated signal samples Patent
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Elimination of frequency shift in a multiplex communication system Patent
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Coaxial cable connector Patent
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Correlation function apparatus Patent
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Data compressor Patent
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Reduced bandwidth video communication system utilizing sampling techniques Patent
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Model launcher for wind tunnels Patent
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Drive circuit utilizing two cores Patent
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Time of flight mass spectrometer with feedback means from the detector to the low source and a specific counter Patent
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Method of resolving clock synchronization error and means therefor Patent
[NASA-CASE-XNP-08875] c10 N71-23099

Impact testing machine Patent
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Zeta potential flowmeter Patent
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Millimeter wave radiometer for radio astronomy Patent
[NASA-CASE-XNP-09832] c30 N71-23723

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[NASA-CASE-XNP-06510] c14 N71-23797

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[NASA-CASE-XNP-01306-2] c09 N71-24596

Apparatus for testing polymeric materials Patent
[NASA-CASE-XNP-09699] c06 N71-24607

Digital synchronizer Patent
[NASA-CASE-NPO-10851] c07 N71-24613

Signal processing apparatus for multiplex transmission Patent
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Space simulator Patent [NASA-CASE-NPO-10141]	c11 N71-24964	Trialkyl-dihalotantalum and niobium compounds Patent [NASA-CASE-XNP-04023]	c06 N71-28808
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Video communication system and apparatus Patent [NASA-CASE-XNP-06611]	c07 N71-26102	High power microwave power divider Patent [NASA-CASE-NPO-11031]	c07 N71-33606
Parallel generation of the check bits of a PN sequence Patent [NASA-CASE-XNP-04623]	c10 N71-26103	A dc servosystem including an ac motor Patent [NASA-CASE-NPO-10700]	c07 N71-33613
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Electron beam tube containing a multiple cathode array employing indexing means for cathode substitution Patent [NASA-CASE-NPO-10625]	c09 N71-26182	Manually actuated heat pump [NASA-CASE-NPO-10677]	c05 N72-11084
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Cascaded complementary pair broadband transistor amplifiers Patent [NASA-CASE-NPO-10003]	c10 N71-26415	Vibration isolation system using compression springs [NASA-CASE-NPO-11012]	c15 N72-11391
Digital memory in which the driving of each word location is controlled by a switch core Patent [NASA-CASE-XNP-01466]	c10 N71-26434	Feed system for an ion thruster [NASA-CASE-NPO-10737]	c28 N72-11709
Conically shaped cavity radiometer with a dual purpose cone winding Patent [NASA-CASE-XNP-09701]	c14 N71-26475	Thermostatic actuator [NASA-CASE-NPO-10637]	c15 N72-12409
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Optical binocular scanning apparatus [NASA-CASE-NPO-11002]	c14 N72-22441	Interferometer-polarimeter [NASA-CASE-NPO-11239]	c14 N73-12446
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Solid propellant rocket motor nozzle [NASA-CASE-NPO-11458]	c28 N72-23810	Gas flow control device [NASA-CASE-NPO-11479]	c15 N73-13462
Analysis of hydrogen-deuterium mixtures [NASA-CASE-NPO-11322]	c06 N72-25146		
Flexible computer accessed telemetry [NASA-CASE-NPO-11358]	c07 N72-25172		
Multi-purpose antenna employing dish reflector with plural coaxial horn feeds			

Electrolytic gas operated actuator
[NASA-CASE-NPO-11369] c15 N73-13467

Dual purpose momentum wheels for spacecraft with magnetic recording
[NASA-CASE-NPO-11481] c21 N73-13644

Multiple reflector conical microwave antenna
[NASA-CASE-NPO-11661] c07 N73-14130

Cyclically operable optical shutter
[NASA-CASE-NPO-10758] c14 N73-14427

Heat detection and compositions and devices therefor
[NASA-CASE-NPO-10764-1] c14 N73-14428

Parallel-plate viscometer with double diaphragm suspension
[NASA-CASE-NPO-11387] c14 N73-14429

Rotary actuator
[NASA-CASE-NPO-10680] c31 N73-14855

Magnetically actuated tuning method for Gunn oscillators
[NASA-CASE-NPO-12106] c09 N73-15235

Multichannel telemetry system
[NASA-CASE-NPO-11572] c07 N73-16121

Data-aided carrier tracking loops
[NASA-CASE-NPO-11282] c10 N73-16205

Stacked solar cell arrays
[NASA-CASE-NPO-11771] c03 N73-20040

An n-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254

Apparatus for recovering matter adhered to a host surface
[NASA-CASE-NPO-11213] c15 N73-20514

Scan converting video tape recorder
[NASA-CASE-NPO-10166-1] c07 N73-22076

Collapsible structure for an antenna reflector
[NASA-CASE-NPO-11751] c07 N73-24176

Pump for delivering heated fluids
[NASA-CASE-NPO-11417] c15 N73-24513

Ion thruster with a combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783

Solid propellant rocket motor
[NASA-CASE-NPO-11559] c28 N73-24784

Code regenerative clean-up loop transponder for a mu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161

Numerical computer peripheral interactive device with manual controls
[NASA-CASE-NPO-11497] c08 N73-25206

Radiant source tracker independent of nonconstant irradiance
[NASA-CASE-NPO-11686] c14 N73-25462

Two carrier communication system with single transmitter
[NASA-CASE-NPO-11548] c07 N73-26118

High pulse rate high resolution optical radar system
[NASA-CASE-NPO-11426] c07 N73-26119

Counting digital filters
[NASA-CASE-NPO-11821-1] c08 N73-26175

Automated attendance accounting system
[NASA-CASE-NPO-11456] c08 N73-26176

Low phase noise digital frequency divider
[NASA-CASE-NPO-11569] c10 N73-26229

Vehicle for use in planetary exploration
[NASA-CASE-NPO-11366] c11 N73-26238

Temperature control system with a pulse width modulated bridge
[NASA-CASE-NPO-11304] c14 N73-26430

Disconnect unit
[NASA-CASE-NPO-11330] c33 N73-26958

Filter for third order phase locked loops
[NASA-CASE-NPO-11941-1] c10 N73-27171

Receiver with an improved phase lock loop in a multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

Analog-to-digital converter
[NASA-CASE-NPO-00477] c08 N73-28045

Pseudonoise (PN) synchronization of data system with derivation of clock frequency from received signal for clocking receiver PN generator
[NASA-CASE-NPO-03623] c09 N73-28084

Apparatus and method for measuring the Seebeck coefficient and resistivity of materials
[NASA-CASE-NPO-11749] c14 N73-28486

Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-NPO-05231] c14 N73-28491

Continuous magnetic flux pump
[NASA-CASE-NPO-01187] c15 N73-28516

Preparation of alkali metal dispersions
[NASA-CASE-NPO-08876] c17 N73-28573

Superconductive magnetic-field-trapping device
[NASA-CASE-NPO-01185] c26 N73-28710

Automatic carrier acquisition system
[NASA-CASE-NPO-11628-1] c07 N73-30113

Ferrofluidic solenoid
[NASA-CASE-NPO-11738-1] c09 N73-30185

Silent emergency alarm system for schools and the like
[NASA-CASE-NPO-11307-1] c10 N73-30205

RF-source resistance meters
[NASA-CASE-NPO-11291-1] c14 N73-30388

Event sequence detector
[NASA-CASE-NPO-11703-1] c10 N73-32144

Soil penetrometer
[NASA-CASE-NPO-05530] c14 N73-32321

Quadrupole mass filter with means to generate a noise spectrum exclusive of the resonant frequency of the desired ions to deflect stable ions
[NASA-CASE-NPO-04231] c14 N73-32325

Magnetic-flux pump
[NASA-CASE-NPO-01188] c15 N73-32361

Burrowing apparatus
[NASA-CASE-NPO-07169] c15 N73-32362

Electrostatically controlled heat shutter
[NASA-CASE-NPO-11942-1] c33 N73-32818

Method and apparatus for a single channel digital communications system
[NASA-CASE-NPO-11302-2] c07 N74-10132

Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c09 N74-10194

Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c07 N74-11000

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c14 N74-11283

Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c14 N74-11284

Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c08 N74-12887

Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c09 N74-12912

Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NPO-11317-2] c16 N74-13205

Use of thin film light detector
[NASA-CASE-NPO-11432-2] c14 N74-15090

Temperature compensated digital inertial sensor
[NASA-CASE-NPO-13044-1] c14 N74-15094

Compact hydrogenator
[NASA-CASE-NPO-11682-1] c15 N74-15127

Short range laser obstacle detector
[NASA-CASE-NPO-11856-1] c16 N74-15145

System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c09 N74-17927

Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c33 N74-19584

Storage battery comprising negative plates of a wedge shaped configuration
[NASA-CASE-NPO-11806-1] c03 N74-19693

Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c07 N74-19788

Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c14 N74-20009

Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NPO-13103-1] c07 N74-20811

Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c15 N74-21060

Thin film gauge
[NASA-CASE-NPO-10617-1] c14 N74-22095

High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c07 N74-22814

Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c14 N74-23040

Scanning nozzle plating system
[NASA-CASE-NPO-11758-1] c15 N74-23065

Rock sampling [NASA-CASE-XNP-10007-1]	c15 N74-23068	Fabrication of hollow elastomeric bodies [NASA-CASE-NPO-13535-1]	c37 N75-21637
Rock sampling [NASA-CASE-NPO-09755]	c15 N74-23069	High resolution Fourier interferometer-spectrophotopolarimeter [NASA-CASE-NPO-13604-1]	c35 N75-22688
Miniature multichannel biotelemetry system [NASA-CASE-NPO-13065-1]	c05 N74-26625	Myocardium wall thickness transducer [NASA-CASE-NPO-13644-1]	c35 N75-22689
Dispensing targets for ion beam particle generators [NASA-CASE-NPO-13112-1]	c11 N74-26767	Solar powered pump [NASA-CASE-NPO-13567-1]	c37 N75-22746
Optically detonated explosive device [NASA-CASE-NPO-11743-1]	c33 N74-27425	Stirling cycle engine and refrigeration systems [NASA-CASE-NPO-13613-1]	c37 N75-22747
High voltage, high current Schottky barrier solar cell [NASA-CASE-NPO-13482-1]	c03 N74-30448	Motion restraining device [NASA-CASE-NPO-13619-1]	c37 N75-22748
Coherent receiver employing nonlinear coherence detection for carrier tracking [NASA-CASE-NPO-11921-1]	c07 N74-30523	Wide angle sun sensor [NASA-CASE-NPO-13327-1]	c35 N75-23910
Computer interface system [NASA-CASE-NPO-13428-1]	c08 N74-30549	Material suspension within an acoustically excited resonant chamber [NASA-CASE-NPO-13263-1]	c12 N75-24774
Digital servo control of random sound test excitation [NASA-CASE-NPO-11623-1]	c23 N74-31148	Heat operated cryogenic electrical generator [NASA-CASE-NPO-13303-1]	c20 N75-24837
Ion and electron detector for use in an ICR spectrometer [NASA-CASE-NPO-13479-1]	c14 N74-32890	System for interference signal nulling by polarization adjustment [NASA-CASE-NPO-13140-1]	c32 N75-24982
Apparatus for forming drive belts [NASA-CASE-NPO-13205-1]	c15 N74-32917	Heat detection and compositions and devices therefor [NASA-CASE-NPO-10764-2]	c35 N75-25122
Tool for use in lifting pin supported objects [NASA-CASE-NPO-13157-1]	c15 N74-32918	Servo-controlled intravitral microscope system [NASA-CASE-NPO-13214-1]	c35 N75-25123
Preparing oxidizer coated metal fuel particles [NASA-CASE-NPO-11975-1]	c27 N74-33209	Catheter tip force transducer for cardiovascular research [NASA-CASE-NPO-13643-1]	c54 N75-25598
Double discharge metal vapor laser with metal halide as a lasant [NASA-CASE-NPO-13448-1]	c16 N74-34012	Vehicle locating system utilizing AM broadcasting station carriers [NASA-CASE-NPO-13217-1]	c32 N75-26194
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Fiber distributed feedback laser [NASA-CASE-NPO-13531-1]	c36 N75-13243	Space communication system for compressed data with a concatenated Reed Solomon-Viterbi coding channel [NASA-CASE-NPO-13545-1]	c32 N75-26207
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Real time analysis of voiced sounds [NASA-CASE-NPO-13465-1]	c71 N75-13593	Fluorescence detector for monitoring atmospheric pollutants [NASA-CASE-NPO-13231-1]	c45 N75-27585
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Simultaneous acquisition of tracking data from two stations [NASA-CASE-NPO-13292-1]	c32 N75-15854	Low cost solar energy collection system [NASA-CASE-NPO-13579-1]	c44 N75-28519
The dc-to-dc converters employing staggered phase power switches with two loop control [NASA-CASE-NPO-13512-1]	c33 N75-15876	Cryostat system for temperatures on the order of 2 deg K or less [NASA-CASE-NPO-13459-1]	c31 N75-29277
Soft X-ray laser using crystal channels as distributed feedback cavities [NASA-CASE-NPO-13532-1]	c36 N75-15973	Method and apparatus for background signal reduction in opto-acoustic absorption measurement [NASA-CASE-NPO-13683-1]	c35 N75-29383
Method and apparatus for generating coherent radiation in the ultraviolet region and above by use of distributed feedback [NASA-CASE-NPO-13346-1]	c70 N75-16307	Refrigerated coaxial coupling [NASA-CASE-NPO-13504-1]	c33 N75-30430
Scattering independent determination of absorption and emission coefficients and radiative equilibrium state [NASA-CASE-NPO-13677-1]	c35 N75-16791	Electric power generation system directory from laser power [NASA-CASE-NPO-13308-1]	c36 N75-30524
Wind sensor [NASA-CASE-NPO-13462-1]	c35 N75-16807	Subminiature insertable force transducer [NASA-CASE-NPO-13423-1]	c33 N75-31329
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Shock absorbing mount for electrical components [NASA-CASE-NPO-13253-1]	c37 N75-18573	Doped Josephson tunneling junction for use in a sensitive IR detector [NASA-CASE-NPO-13348-1]	c33 N75-31332
System for generating timing and control signals [NASA-CASE-NPO-13125-1]	c33 N75-19519	Acoustically controlled distributed feedback laser [NASA-CASE-NPO-13175-1]	c36 N75-31427
Motor run-up system [NASA-CASE-NPO-13374-1]	c33 N75-19524	An improved furlable antenna [NASA-CASE-NPO-13553-1]	c32 N75-32281
Frequency scanning particle size spectrometer [NASA-CASE-NPO-13606-1]	c35 N75-19627	Distributed feedback acoustic surface wave oscillator [NASA-CASE-NPO-13673-1]	c33 N75-32323
Particle size spectrometer and refractometer [NASA-CASE-NPO-13614-1]	c35 N75-19628	Inert gas metallic vapor laser [NASA-CASE-NPO-13449-1]	c36 N75-32441
Deep trap, laser activated image converting system [NASA-CASE-NPO-13131-1]	c36 N75-19652	Lightweight reflector assembly and method [NASA-CASE-NPO-13707-1]	c74 N75-32894
Multitarget sequential sputtering apparatus [NASA-CASE-NPO-13345-1]	c37 N75-19684		
Method and apparatus for providing a servodrive signal in a high speed stepping interferometer [NASA-CASE-NPO-13569-1]	c35 N75-21600		

Sun direction detection system
[NASA-CASE-NPO-13722-1] c19 N75-33169

High temperature oxidation resistant cermet compositions
[NASA-CASE-NPO-13666-1] c27 N76-13293

High temperature resistant cermet and ceramic compositions
[NASA-CASE-NPO-13690-1] c27 N76-13294

Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N76-13456

Helium refrigerator
[NASA-CASE-NPO-13435-1] c31 N76-14284

Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c33 N76-14373

Strain gage mounting assembly
[NASA-CASE-NPO-13170-1] c35 N76-14430

Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N76-14433

Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NPO-13756-1] c35 N76-14434

Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602

Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818

Cermet composition and method of fabrication
[NASA-CASE-NPO-13120-1] c27 N76-15311

Dichroic plate
[NASA-CASE-NPO-13506-1] c35 N76-15435

Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c44 N76-15573

Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390

Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391

Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446

Photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N76-17216

A machine for use in monitoring fatigue life for a plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N76-17427

Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245

Analog to digital converter
[NASA-CASE-NPO-13385-1] c33 N76-18345

Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401

Stark-effect modulation of CO₂ laser with NE2D
[NASA-CASE-NPO-11945-1] c36 N76-18427

Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N76-18428

System for minimizing internal combustion engine pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457

Hydrogen-rich gas generator
[NASA-CASE-NPO-13560] c37 N76-18460

Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641

Hydrogen-rich gas generator
[NASA-CASE-NPO-13464-1] c44 N76-18642

Zinc-halide battery with molten electrolyte
[NASA-CASE-NPO-11961-1] c44 N76-18643

Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N76-18680

Priority interrupt system
[NASA-CASE-NPO-13067-1] c60 N76-18800

Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NPO-13753-1] c61 N76-18826

Acoustic energy shaping
[NASA-CASE-NPO-13802-1] c71 N76-18886

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338

Zero torque gear head wrench
[NASA-CASE-NPO-13059-1] c37 N76-20480

Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994

Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742

Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914

JOHNS HOPKINS UNIV., BALTIMORE, MD.
Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N76-13377

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KELSEY-HAYES CO., ROMULUS, MICH.
Variable thrust ion engine utilizing thermally decomposable solid fuel Patent
[NASA-CASE-XMP-00923] c28 N70-36802

KELTEC INDUSTRIES, INC., ALEXANDRIA, VA.
Unfurlable structure including coiled strips thrust launched upon tension release Patent
[NASA-CASE-HQN-00937] c07 N71-28979

KINELOGIC CORP., PASADENA, CALIF.
Excitation and detection circuitry for a flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329

Tape guidance system and apparatus for the provision thereof Patent
[NASA-CASE-XNP-09453] c08 N71-19420

Incremental tape recorder and data rate converter Patent
[NASA-CASE-XNP-02778] c08 N71-22710

KOLLSMAN INSTRUMENT CORP., ELMHURST, N.Y.
Wide angle long eye relief eyepiece Patent
[NASA-CASE-XMS-06056-1] c23 N71-24857

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Digital modulator and demodulator Patent
[NASA-CASE-ERC-10041] c08 N71-29138

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[NASA-CASE-GSC-11487-1] c14 N73-30393

KONIGSBERG INSTRUMENTS, INC., PASADENA, CALIF.
Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c35 N75-20685

KORAD CORP., NEW YORK.
Laser apparatus for removing material from rotating objects Patent
[NASA-CASE-MFS-11279] c16 N71-20400

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LIFE SYSTEMS, INC., CLEVELAND, OHIO.
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N75-25594

LING-TENCO-VOUGHT, INC., DALLAS, TEX.
Latch/ejector unit Patent
[NASA-CASE-XLA-03538] c15 N71-24897

Analysis of volatile organic compounds
[NASA-CASE-MSC-14428-1] c06 N74-19776

LITTLE (ARTHUR D.), INC., CAMBRIDGE, MASS.
Apparatus for measuring thermal conductivity Patent
[NASA-CASE-XGS-01052] c14 N71-15992

Flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-1] c18 N73-27501

LITTON INDUSTRIES, BEVERLY HILLS, CALIF.
Life support system
[NASA-CASE-MSC-12411-1] c05 N72-20096

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Shrink-fit gas valve Patent
[NASA-CASE-XGS-00587] c15 N70-35087

LITTON INDUSTRIES, SAN CARLOS, CALIF.
Very high intensity light source using a cathode ray tube
[NASA-CASE-XNP-01296] c33 N75-27250

LITTON SYSTEMS, INC., MINNEAPOLIS, MINN.
Apparatus for sampling particulates in gases
[NASA-CASE-HQN-10037-1] c14 N73-27376

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Aerodynamic protection for space flight vehicles Patent
[NASA-CASE-XNP-02507] c31 N71-17679

LOCKHEED ELECTRONICS CO., HOUSTON, TEX.
Television signal scan rate conversion system Patent
[NASA-CASE-XMS-07168] c07 N71-11300

Burst synchronization detection system Patent
[NASA-CASE-XMS-05605-1] c10 N71-19468

Automatic signal range selector for metering devices Patent
[NASA-CASE-XMS-06497] c14 N71-26244

Monostable multivibrator with complementary NOR gates Patent
[NASA-CASE-MSC-13492-1] c10 N71-28860

Ultrastable calibrated light source
 [NASA-CASE-MSC-12293-1] c14 N72-27411
 Data storage, image tube type
 [NASA-CASE-MSC-14053-1] c08 N74-12888
 Differential phase shift keyed communication
 system
 [NASA-CASE-MSC-14065-1] c07 N74-26654
 Differential phase shift keyed signal resolver
 [NASA-CASE-MSC-14066-1] c10 N74-27705
 Method and apparatus for decoding compatible
 convolutional codes
 [NASA-CASE-MSC-14070-1] c07 N74-32598
 Pulse stretcher for narrow pulses
 [NASA-CASE-MSC-14130-1] c10 N74-32711
 Peak holding circuit for extremely narrow pulses
 [NASA-CASE-MSC-14129-1] c33 N75-18479
 Random pulse generator
 [NASA-CASE-MSC-14131-1] c33 N75-19515
 Digital transmitter for data bus communications
 system
 [NASA-CASE-MSC-14558-1] c32 N75-21486
 Method and system for producing chroma signals
 [NASA-CASE-MSC-14683-1] c74 N75-33835
 Low distortion receiver for bi-level baseband
 PCM waveforms
 [NASA-CASE-MSC-14557-1] c32 N76-16249
LOCKHEED MISSILES AND SPACE CO., HUNTSVILLE, ALA.
 Wind measurement system
 [NASA-CASE-MFS-23362-1] c47 N76-13701
LOCKHEED MISSILES AND SPACE CO., SUNNYVALE, CALIF.
 Device for handling heavy loads
 [NASA-CASE-XNP-04969] c11 N69-27466
 Transient heat transfer gauge Patent
 [NASA-CASE-XNP-09802] c33 N71-15641
 Dual solid cryogenics for spacecraft refrigeration
 Patent
 [NASA-CASE-GSC-10188-1] c23 N71-24725
 Apparatus for detecting the amount of material
 in a resonant cavity container Patent
 [NASA-CASE-XNP-02500] c18 N71-27397
 Emergency earth orbital escape device
 [NASA-CASE-MSC-13281] c31 N72-18859
 Solar energy powered heliotope
 [NASA-CASE-GSC-10945-1] c21 N72-31637
 Coaxial inverted geometry transistor having
 buried emitter
 [NASA-CASE-ARC-10330-1] c09 N73-32112
 Whole body measurement systems
 [NASA-CASE-MSC-13972-1] c05 N74-10975
 Ceramic coating for silica insulation
 [NASA-CASE-MSC-14270-2] c18 N74-30004
 Four phase logic systems
 [NASA-CASE-MSC-14240-1] c33 N75-14957
 Strain arrestor plate for fused silica tile
 [NASA-CASE-MSC-14182-1] c27 N76-14264
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 [NASA-CASE-MSC-14180-1] c52 N76-14757
LOCKHEED PROPULSION CO., REDLANDS, CALIF.
 Propellant grain for rocket motors Patent
 [NASA-CASE-XGS-03556] c27 N70-35534
LOCKHEED-CALIFORNIA CO., BURBANK.
 Absorptive splitter for closely spaced
 supersonic engine air inlets Patent
 [NASA-CASE-XLA-02865] c28 N71-15563
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 [NASA-CASE-XMP-02263] c02 N74-10907
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 Method of fluxless brazing and diffusion bonding
 of aluminum containing components
 [NASA-CASE-MSC-14435-1] c37 N76-18455

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MACON-RUST CO., LEXINGTON, KY.
 Stretcher Patent
 [NASA-CASE-XMP-06589] c05 N71-23159
MARLIN-ROCKWELL CORP., JAMESTOWN, N.Y.
 Drilled ball bearing with a one piece
 anti-tipping cage assembly
 [NASA-CASE-LEW-11925-1] c37 N75-31446
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 engines Patent
 [NASA-CASE-MSC-12139-1] c28 N71-14058
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 nozzle Patent
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 Tube sealing device Patent
 [NASA-CASE-NPO-10431] c15 N71-29132

MARTIN MARIETTA AEROSPACE, DENVER, COLO.
 Method and apparatus for tensile testing of
 metal foil
 [NASA-CASE-LAR-10208-1] c35 N76-18400
MARTIN MARIETTA CORP., BALTIMORE, MD.
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 [NASA-CASE-XHF-01174] c02 N70-41589
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 [NASA-CASE-XKS-02342] c05 N71-11199
 Device to prevent clogging in a hopper
 [NASA-CASE-LAR-10961-1] c15 N73-12496
MARTIN MARIETTA CORP., DENVER, COLO.
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 [NASA-CASE-MSC-13512-1] c15 N72-22485
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 integrated circuit four-quadrant multiplier
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 [NASA-CASE-MFS-21671-1] c10 N74-22885
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 control system for shuttle remote manipulator
 system
 [NASA-CASE-MSC-14245-1] c18 N75-27041
 Varying density composite structure
 [NASA-CASE-LAR-11181-1] c39 N75-31479
 Filter regeneration systems
 [NASA-CASE-MSC-14273-1] c34 N75-33342
 Turnstile and flared cone UHF antenna
 [NASA-CASE-LAR-10970-1] c33 N76-14372
 Method and apparatus for fluffing, separating,
 and cleaning fibers
 [NASA-CASE-LAR-11224-1] c37 N76-18456
 A method for fabricating graphite/epoxy laminate
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 optical maser Patent
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 system Patent
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 system
 [NASA-CASE-HQN-10541-3] c23 N72-23695
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 [NASA-CASE-HQN-10703] c21 N73-13643
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 [NASA-CASE-MSC-13746-1] c10 N73-32143
 Vapor deposition apparatus
 [NASA-CASE-HQN-10462] c25 N75-29192
 Fault tolerant clock apparatus utilizing a
 controlled minority of clock elements
 [NASA-CASE-MSC-12531-1] c35 N75-30504
MCDONNELL AIRCRAFT CO., ST. LOUIS, MO.
 Method for making a heat insulating and ablative
 structure
 [NASA-CASE-XMS-01108] c15 N69-24322
 Heat flux sensor assembly
 [NASA-CASE-XMS-05909-1] c14 N69-27459
 Apparatus for purging systems handling toxic,
 corrosive, noxious and other fluids Patent
 [NASA-CASE-XMS-01905] c12 N71-21089
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 [NASA-CASE-XMS-00913] c10 N71-23543
 Multiple circuit protector device
 [NASA-CASE-XMS-02744] c33 N75-27249
 Apparatus for welding sheet material
 [NASA-CASE-XMS-01330] c37 N75-27376
**MCDONNELL-DOUGLAS AERONAUTICS CO., HUNTINGTON
 BEACH, CALIF.**
 Heat transfer device

- [NASA-CASE-MFS-22938-1] c34 N76-18374
MCDONNELL-DOUGLAS AERONAUTICS CO., SANTA MONICA, CALIF.
 New polymers of perfluorobutadiene and method of manufacture Patent application
 [NASA-CASE-NPO-10863] c06 N70-11251
 Method of polymerizing perfluorobutadiene Patent application
 [NASA-CASE-NPO-10447] c06 N70-11252
MCDONNELL-DOUGLAS CORP., HUNTINGTON BEACH, CALIF.
 Variable direction force coupler
 [NASA-CASE-MFS-20317] c15 N73-13463
 Potable water dispenser
 [NASA-CASE-MFS-21115-1] c05 N74-12779
 Metering gun for dispensing precisely measured charges of fluid
 [NASA-CASE-MFS-21163-1] c05 N74-17853
 Airlock
 [NASA-CASE-MFS-20922-1] c15 N74-22136
 Device for monitoring a change in mass in varying gravimetric environments
 [NASA-CASE-MFS-21556-1] c14 N74-26945
 Thrust-isolating mounting
 [NASA-CASE-MFS-21680-1] c32 N74-27397
 Device for measuring tensile forces
 [NASA-CASE-MFS-21728-1] c14 N74-27865
 Flame detector operable in presence of proton radiation
 [NASA-CASE-MFS-21577-1] c03 N74-29410
 Phase-locked servo system
 [NASA-CASE-MFS-22073-1] c33 N75-13139
 Vacuum leak detector
 [NASA-CASE-LAR-11237-1] c35 N75-19612
 Meter for use in detecting tension in straps having predetermined elastic characteristics
 [NASA-CASE-MFS-22189-1] c35 N75-19615
 Latching device
 [NASA-CASE-MFS-21606-1] c37 N75-19685
 Device for use in loading tension members
 [NASA-CASE-MFS-21488-1] c14 N75-24794
MCDONNELL-DOUGLAS CORP., NEWPORT BEACH, CALIF.
 Method of making membranes
 [NASA-CASE-XNP-04264] c03 N69-21337
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 Rocket nozzle test method Patent
 [NASA-CASE-NPO-10311] c31 N71-15643
 Reaction of fluorine with polyperfluoropolyenes
 [NASA-CASE-NPO-10862] c06 N72-22107
 Polymers of perfluorobutadiene and method of manufacture
 [NASA-CASE-NPO-10863-2] c06 N72-25152
 Electrolytic cell structure
 [NASA-CASE-LAR-11042-1] c33 N75-27252
 Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions
 [NASA-CASE-NPO-12122-1] c24 N76-14203
 Utilization of oxygen difluoride for syntheses of fluoropolymers
 [NASA-CASE-NPO-12061-1] c27 N76-16228
MCDONNELL-DOUGLAS CORP., ST. LOUIS, MO.
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 [NASA-CASE-GSC-11304-1] c06 N72-21105
MEDICAL SCIENCES RESEARCH FOUNDATION, SAN FRANCISCO, CALIF.
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 [NASA-CASE-NPO-12119-1] c52 N75-15270
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 Instrument for measuring torsional creep and recovery Patent
 [NASA-CASE-XLE-01481] c14 N71-10781
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METCOM, INC., SALEM, MASS.
 Tuning arrangement for an electron discharge device or the like Patent
 [NASA-CASE-XNP-09771] c09 N71-24841
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 [NASA-CASE-MSC-14623-1] c52 N76-13735
MICROWAVE ELECTRONICS CORP., PALO ALTO, CALIF.
 Folded traveling wave maser structure Patent
 [NASA-CASE-XNP-05219] c16 N71-15550
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- MICROWAVE RESEARCH CORP., NORTH ANDOVER, MASS.**
 Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
 [NASA-CASE-NPO-13568-1] c32 N76-21365
MIDWEST RESEARCH INST., KANSAS CITY, MO.
 Preparation of ordered polyarylenesiloxane/polymers
 [NASA-CASE-XMP-10753] c06 N71-11237
 Inorganic solid film lubricants Patent
 [NASA-CASE-XMP-03988] c15 N71-21403
 Fluorinated esters of polycarboxylic acids
 [NASA-CASE-MFS-21040-1] c06 N73-30098
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 Film feed camera having a detent means Patent
 [NASA-CASE-LAR-10686] c14 N71-28935
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 [NASA-CASE-XMS-02182] c10 N71-28783
MODERN MACHINE AND TOOL CO., NEWPORT NEWS, VA.
 Means for accommodating large overstrain in lead wires
 [NASA-CASE-LAR-10168-1] c09 N74-22865
MONSANTO RESEARCH CORP., DAYTON, OHIO.
 Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides
 [NASA-CASE-MFS-22356-1] c23 N75-30256
 Polyimides of ether-linked aryl tetracarboxylic dianhydrides
 [NASA-CASE-MFS-22355-1] c23 N76-15268
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 [NASA-CASE-XMP-08665] c10 N71-19467
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 [NASA-CASE-MFS-14322] c08 N71-18692
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 [NASA-CASE-MSC-13201-1] c07 N71-28429
 Capacitance multiplier and filter synthesizing network
 [NASA-CASE-NPO-11948-1] c10 N74-32712
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 Gyrator employing field effect transistors
 [NASA-CASE-MFS-21433] c09 N73-20232
 Suppression of flutter
 [NASA-CASE-LAR-10682-1] c02 N73-26004
 Optical data processing using paraboloidal mirror segments
 [NASA-CASE-GSC-11296-1] c23 N73-30666
 Power supply for carbon dioxide lasers
 [NASA-CASE-GSC-11222-1] c16 N73-32391
 Electron microscope aperture system
 [NASA-CASE-ARC-10448-3] c14 N74-12191
 High field CdS detector for infrared radiation
 [NASA-CASE-LAR-11027-1] c14 N74-18088
 Holography utilizing surface plasmon resonances
 [NASA-CASE-MFS-22040-1] c14 N74-26946
 Stagnation pressure probe
 [NASA-CASE-LAR-11139-1] c14 N74-32878
 Integrated P-channel MOS gyrator
 [NASA-CASE-MFS-22343-1] c09 N74-34638
 Automated analysis of oxidative metabolites
 [NASA-CASE-ARC-10469-1] c25 N75-12086
 Method of preparing water purification membranes
 [NASA-CASE-ARC-10643-1] c25 N74-12087
 Method of forming aperture plate for electron microscope
 [NASA-CASE-ARC-10448-2] c74 N75-12732
 Method of growing composites of the type exhibiting the Soret effect
 [NASA-CASE-MFS-22926-1] c25 N75-19380
 Dually mode locked Nd:YAG laser
 [NASA-CASE-GSC-11746-1] c36 N75-19654
 Anti-gravity device
 [NASA-CASE-MFS-22758-1] c70 N75-26789
 Impact position detector for outer space particles
 [NASA-CASE-GSC-11829-1] c35 N75-27331
 Integrable power gyrator
 [NASA-CASE-MFS-22342-1] c33 N75-30428

Method for making a hot wire anemometer and product thereof		[NASA-CASE-XAC-08494]	c30 N71-15990
[NASA-CASE-ARC-10900-1]	c35 N76-13455	High efficiency multivibrator Patent	
Two stage light gas-plasma projectile accelerator		[NASA-CASE-XAC-00942]	c10 N71-16042
[NASA-CASE-MFS-22287-1]	c75 N76-14931	Apparatus for measuring conductivity and velocity of plasma utilizing a plurality of sensing coils positioned in the plasma Patent	
Micrometeoroid velocity and trajectory analyzer		[NASA-CASE-XAC-05695]	c25 N71-16073
[NASA-CASE-GSC-11892-1]	c35 N76-15433	Flight craft Patent	
Method and apparatus for splitting a beam of energy		[NASA-CASE-XAC-02058]	c02 N71-16087
[NASA-CASE-GSC-12083-1]	c36 N76-15451	Three-axis finger tip controller for switches Patent	
Moving particle composition analyzer		[NASA-CASE-XAC-02405]	c09 N71-16089
[NASA-CASE-GSC-11889-1]	c35 N76-16393	Electrostatic charged particle analyzer having deflection members shaped according to the periodic voltage applied thereto Patent	
A length controlled stabilized mode-lock Nd:YAG laser		[NASA-CASE-XAC-05506-1]	c24 N71-16095
[NASA-CASE-GSC-11571-1]	c36 N76-17384	Inertial reference apparatus Patent	
Self-energized plasma compressor		[NASA-CASE-XAC-03107]	c23 N71-16098
[NASA-CASE-MFS-22145-2]	c75 N76-17951	Pastener apparatus Patent	
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Nonmagnetic thermal motor for a magnetometer		[NASA-CASE-ARC-10140-1]	c15 N71-17653
[NASA-CASE-XAC-03786]	c09 N69-21313	Stabilization of gravity oriented satellites Patent	
Balanced bellows spirometer		[NASA-CASE-XAC-01591]	c31 N71-17729
[NASA-CASE-XAR-01547]	c05 N69-21473	Microwave flaw detector Patent	
Cryogenic apparatus for measuring the intensity of magnetic fields		[NASA-CASE-ARC-10009-1]	c15 N71-17822
[NASA-CASE-XAC-02407]	c14 N69-27423	Hypervelocity gun Patent	
Variable stiffness polymeric damper		[NASA-CASE-XAC-05902]	c11 N71-18578
[NASA-CASE-XAC-11225]	c14 N69-27486	Nonlinear analog-to-digital converter Patent	
Shock-layer radiation measurement		[NASA-CASE-XAC-04031]	c08 N71-18594
[NASA-CASE-XAC-02970]	c14 N69-39896	Demodulation system Patent	
Protective circuit of the spark gap type		[NASA-CASE-XAC-04030]	c10 N71-19472
[NASA-CASE-XAC-08981]	c09 N69-39897	Phase quadrature-plural channel data transmission system Patent	
Apparatus for coupling a plurality of ungrounded circuits to a grounded circuit Patent		[NASA-CASE-XAC-06302]	c08 N71-19763
[NASA-CASE-XAC-00086]	c09 N70-33182	Two force component measuring device Patent	
Two-plane balance Patent		[NASA-CASE-XAC-04886-1]	c14 N71-20439
[NASA-CASE-XAC-00073]	c14 N70-34813	Attitude controls for VTOL aircraft Patent	
Centrifuge mounted motion simulator Patent		[NASA-CASE-XAC-08972]	c02 N71-20570
[NASA-CASE-XAC-00399]	c11 N70-34815	Electric arc apparatus Patent	
Differential pressure cell Patent		[NASA-CASE-XAC-01677]	c09 N71-20816
[NASA-CASE-XAC-00042]	c14 N70-34816	Inertia diaphragm pressure transducer Patent	
High-temperature, high-pressure spherical segment valve Patent		[NASA-CASE-XAC-02981]	c14 N71-21072
[NASA-CASE-XAC-00074]	c15 N70-34817	Stirring apparatus for plural test tubes Patent	
Magnetically centered liquid column float Patent		[NASA-CASE-XAC-06956]	c15 N71-21177
[NASA-CASE-XAC-00030]	c14 N70-34820	Exposure system for animals Patent	
Propeller blade loading control Patent		[NASA-CASE-XAC-05333]	c11 N71-22875
[NASA-CASE-XAC-00139]	c02 N70-34856	Vibrating element electrometer with output signal magnified over input signal by a function of the mechanical Q of the vibrating element Patent	
Temperature compensated solid state differential amplifier Patent		[NASA-CASE-XAC-02807]	c09 N71-23021
[NASA-CASE-XAC-00435]	c09 N70-35440	Hall current measuring apparatus having a series resistor for temperature compensation Patent	
High speed low level electrical stepping switch Patent		[NASA-CASE-XAC-01662]	c14 N71-23037
[NASA-CASE-XAC-00060]	c09 N70-39915	Transfer valve Patent	
Analog-to-digital conversion system Patent		[NASA-CASE-XAC-01158]	c15 N71-23051
[NASA-CASE-XAC-00404]	c08 N70-40125	Hard space suit Patent	
Null-type vacuum microbalance Patent		[NASA-CASE-XAC-07043]	c05 N71-23161
[NASA-CASE-XAC-00472]	c15 N70-40180	Method and apparatus for continuously monitoring blood oxygenation, blood pressure, pulse rate and the pressure pulse curve utilizing an ear oximeter as transducer Patent	
Thermo-protective device for balances Patent		[NASA-CASE-XAC-05422]	c04 N71-23185
[NASA-CASE-XAC-00648]	c14 N70-40400	Feedback integrator with grounded capacitor Patent	
Three-axis controller Patent		[NASA-CASE-XAC-10607]	c10 N71-23669
[NASA-CASE-XAC-01404]	c05 N70-41581	Floating two force component measuring device Patent	
Electric arc device for heating gases Patent		[NASA-CASE-XAC-04885]	c14 N71-23790
[NASA-CASE-XAC-00319]	c25 N70-41628	Control device Patent	
Dynamic sensor Patent		[NASA-CASE-XAC-10019]	c15 N71-23809
[NASA-CASE-XAC-02877]	c14 N70-41681	Means for suppressing or attenuating bending motion of elastic bodies Patent	
Universal pilot restraint suit and body support therefor Patent		[NASA-CASE-XAC-05632]	c32 N71-23971
[NASA-CASE-XAC-00405]	c05 N70-41819	Device for measuring pressure Patent	
Proportional controller Patent		[NASA-CASE-XAC-04458]	c14 N71-24232
[NASA-CASE-XAC-03392]	c03 N70-41954	Transducer circuit and catheter transducer Patent	
Force transducer Patent		[NASA-CASE-ARC-10132-1]	c09 N71-24597
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Electrode construction Patent		[NASA-CASE-ARC-10100-1]	c05 N71-24738
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Differential temperature transducer Patent		[NASA-CASE-ARC-10003-1]	c09 N71-25866
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Multiple circuit switch apparatus with improved pivot actuator structure Patent			
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Optical machine tool alignment indicator Patent [NASA-CASE-XAC-09489-1]	c15 N71-26673	Dual-fuselage aircraft having yawable wing and horizontal stabilizer [NASA-CASE-ARC-10470-1]	c02 N73-26005
Energy limiter for hydraulic actuators Patent [NASA-CASE-ARC-10131-1]	c15 N71-27754	Temperature controller for a fluid cooled garment [NASA-CASE-ARC-10599-1]	c05 N73-26071
Multivibrator circuit with means to prevent false triggering from supply voltage fluctuations Patent [NASA-CASE-ARC-10137-1]	c09 N71-28468	Visual examination apparatus [NASA-CASE-ARC-10329-1]	c05 N73-26072
Locomotion and restraint aid Patent [NASA-CASE-ARC-10153]	c05 N71-28619	Intumescent composition, foamed product prepared therewith, and process for making same [NASA-CASE-ARC-10304-1]	c18 N73-26572
Line following servosystem Patent [NASA-CASE-XAC-00001]	c15 N71-28952	Infrared tunable laser [NASA-CASE-ARC-10463-1]	c09 N73-32111
Mechanically limited, electrically operated hydraulic valve system for aircraft controls Patent [NASA-CASE-XAC-00048]	c02 N71-29128	Low power electromagnetic flowmeter providing accurate zero set [NASA-CASE-ARC-10362-1]	c14 N73-32326
Precision rectifier with PRT switching means Patent [NASA-CASE-ARC-10101-1]	c09 N71-33109	Protection of moisture sensitive optical components [NASA-CASE-ARC-10749-1]	c23 N73-32542
Solar cell Patent [NASA-CASE-ARC-10050]	c03 N71-33409	All sky pointing attitude control system [NASA-CASE-ARC-10716-1]	c31 N73-32784
Phase shift circuit apparatus [NASA-CASE-ARC-10269-1]	c10 N72-16172	Hand-held photomicroscope [NASA-CASE-ARC-10468-1]	c14 N73-33361
High intensity radiant energy pulse source having means for opening shutter when light flux has reached a desired level [NASA-CASE-ARC-10178-1]	c09 N72-17152	Alignment apparatus using a laser having a gravitationally sensitive cavity reflector [NASA-CASE-ARC-10444-1]	c16 N73-33397
Telemetry actuated switch [NASA-CASE-ARC-10105]	c09 N72-17153	Ultra-flexible biomedical electrodes and wires [NASA-CASE-ARC-10268-2]	c05 N74-11900
Active RC networks [NASA-CASE-ARC-10020]	c10 N72-17172	Ultra-flexible biomedical electrode and wires [NASA-CASE-ARC-10268-3]	c05 N74-11901
Apparatus for automatically stabilizing the attitude of a nonguided vehicle [NASA-CASE-ARC-10134]	c30 N72-17873	Ultraviolet and thermally stable polymer compositions [NASA-CASE-ARC-10592-2]	c06 N74-11926
Gas chromatograph injection system [NASA-CASE-ARC-10344-1]	c14 N72-21433	Polyimide foam for the thermal insulation and fire protection [NASA-CASE-ARC-10464-1]	c06 N74-12812
Method and apparatus for swept-frequency impedance measurements of welds [NASA-CASE-ARC-10176-1]	c15 N72-21464	Flexible fire retardant polyisocyanate modified neoprene foam [NASA-CASE-ARC-10180-1]	c06 N74-12814
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Method and apparatus for measuring the damping characteristics of a structure [NASA-CASE-ARC-10154-1]	c14 N72-22440	Automatic real-time pair-feeding system for animals [NASA-CASE-ARC-10302-1]	c04 N74-15778
Magnetic position detection method and apparatus [NASA-CASE-ARC-10179-1]	c21 N72-22619	Anthropomorphic master/slave manipulator system [NASA-CASE-ARC-10756-1]	c15 N74-16139
Fluidic proportional thruster system [NASA-CASE-ARC-10106-1]	c28 N72-22769	Overvoltage protection network [NASA-CASE-ARC-10197-1]	c09 N74-17929
Thermoelectric radionometer utilizing polymer film [NASA-CASE-ARC-10138-1]	c14 N72-24477	Visual examination apparatus [NASA-CASE-ARC-10329-2]	c05 N74-19761
Polymeric vehicles as carriers for sulfonic acid salt of nitrosubstituted aromatic amines [NASA-CASE-ARC-10325]	c06 N72-25147	Ultrasonic biomedical measuring and recording apparatus [NASA-CASE-ARC-10597-1]	c05 N74-20726
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Metallic intrusion detector system [NASA-CASE-ARC-10265-1]	c10 N72-28240	High speed shutter [NASA-CASE-ARC-10516-1]	c23 N74-21300
Apparatus for ionization analysis [NASA-CASE-ARC-10017-1]	c14 N72-29464	Bio-isolated dc operational amplifier [NASA-CASE-ARC-10596-1]	c09 N74-21851
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Two degree inverted flexure [NASA-CASE-ARC-10345-1]	c15 N73-12488	Chromato-fluorographic drug detector [NASA-CASE-ARC-10633-1]	c14 N74-26947
Intumescent paint containing nitrile rubber [NASA-CASE-ARC-10196-1]	c18 N73-13562	Intumescent composition, foamed product prepared therewith and process for making same [NASA-CASE-ARC-10304-2]	c18 N74-27037
Miniature ingestible telemeter devices to measure deep body temperature [NASA-CASE-ARC-10583-1]	c05 N73-14093	Photomultiplier circuit including means for rapidly reducing the sensitivity thereof [NASA-CASE-ARC-10593-1]	c09 N74-27682
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Self-tuning bandpass filter [NASA-CASE-ARC-10264-1]	c09 N73-20231	Concentric differential gearing arrangement [NASA-CASE-ARC-10462-1]	c15 N74-27901
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Multiple pass reimaging optical system [NASA-CASE-ARC-10194-1]	c23 N73-20741	Measurement of plasma temperature and density using radiation absorption [NASA-CASE-ARC-10598-1]	c25 N74-30156
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		Vehicle simulator binocular multiplanar visual display system [NASA-CASE-ARC-10808-1]	c11 N74-32718

Abating exhaust noises in jet engines
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Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c33 N74-33379

Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c02 N74-34475

Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086

Method of preparing water purification membranes
[NASA-CASE-ARC-10643-1] c25 N75-12087

Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732

Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

Water purification process
[NASA-CASE-ARC-10643-2] c51 N75-13506

Continuous Fourier transform method and apparatus
[NASA-CASE-ARC-10466-1] c60 N75-13539

System for measuring Reynolds stress in a turbulently flowing fluid
[NASA-CASE-ARC-10755-2] c34 N75-16770

Dual wavelength scanning Doppler velocimeter
[NASA-CASE-ARC-10637-1] c35 N75-16783

Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N75-18536

Signal conditioning circuit apparatus
[NASA-CASE-ARC-10348-1] c33 N75-19518

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c35 N75-20685

Reversed cowl flap inlet thrust augmentor
[NASA-CASE-ARC-10754-1] c07 N75-24736

Process for preparing low density polybenzimidazole foams
[NASA-CASE-ARC-10823-1] c27 N75-24938

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

High speed data monitoring apparatus
[NASA-CASE-ARC-10899-1] c35 N75-25127

Rotary plant growth accelerating apparatus
[NASA-CASE-ARC-10722-1] c51 N75-25503

Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

Preparation of dielectric coatings of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-1] c27 N75-26136

Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334

Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760

Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318

G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381

NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502

Jet engine air intake system
[NASA-CASE-ARC-10761-1] c07 N75-31108

Diatomic infrared gasdynamic laser
[NASA-CASE-ARC-10370-1] c36 N75-31426

Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ARC-10896-1] c34 N75-32389

Metallic hot wire anemometer and method for fabricating the same
[NASA-CASE-ARC-10911-1] c35 N75-32426

Pneumatic load compensating or controlling system
[NASA-CASE-ARC-10907-1] c37 N75-32465

Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c54 N75-32766

Smoke generator
[NASA-CASE-ARC-10905-1] c31 N75-33278

Thermistor holder for skin temperature measurements
[NASA-CASE-ARC-10855-1] c52 N75-33642

Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] c09 N76-10148

Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c37 N76-11441

Capacitive shaft encoder
[NASA-CASE-ARC-10897-1] c35 N76-12338

Rotating launch device for a remotely piloted aircraft
[NASA-CASE-ARC-10979-1] c09 N76-13116

Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-1] c27 N76-13292

Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N76-13455

Tubular sublimator/evaporator heat sink
[NASA-CASE-ARC-10912-1] c44 N76-13599

Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447

Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310

Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230

Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131

Modulated hydrogen ion flame detector
[NASA-CASE-ARC-10322-1] c35 N76-18403

Liquid-cooled brassiere
[NASA-CASE-ARC-11007-1] c52 N76-18782

Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339

System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N76-19379

Tread drum for animals
[NASA-CASE-ARC-10917-1] c37 N76-20485

Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector
[NASA-CASE-ARC-10631-1] c74 N76-20958

Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N76-20959

Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390

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Method and apparatus for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343

A method for the deposition of beta-silicon carbide by isoeptitaxy
[NASA-CASE-ERC-10120] c26 N69-33482

Full flow with shut off and selective drainage control valve Patent application
[NASA-CASE-ERC-10208] c15 N70-10867

A method for selective gold diffusion of monolithic silicon devices and/or circuits Patent application
[NASA-CASE-ERC-10072] c09 N70-11148

Method and means for an improved electron beam scanning system Patent
[NASA-CASE-ERC-10552] c09 N71-12539

Apparatus and method for separating a semiconductor wafer Patent
[NASA-CASE-ERC-10138] c26 N71-14354

Focused image holography with extended sources Patent
[NASA-CASE-ERC-10019] c16 N71-15551

Recording and reconstructing focused image holograms Patent
[NASA-CASE-ERC-10017] c16 N71-15567

Sorption vacuum trap Patent
[NASA-CASE-XER-09519] c14 N71-18483

Voltage tunable Gunn-type microwave generator Patent
[NASA-CASE-XER-07894] c09 N71-18721

Array phasing device Patent
[NASA-CASE-ERC-10046] c10 N71-18722

Parametric microwave noise generator Patent
[NASA-CASE-XER-11019] c09 N71-23598

Saturation current protection apparatus for saturable core transformers Patent
[NASA-CASE-ERC-10075] c09 N71-24800

Repetitively pulsed, wavelength selective laser Patent
[NASA-CASE-ERC-10178] c16 N71-24832

Optical mirror apparatus Patent
[NASA-CASE-ERC-10001] c23 N71-24868

Unsaturating saturable core transformer Patent
 [NASA-CASE-ERC-10125] c09 N71-24893
 Leak detector wherein a probe is monitored with
 ultraviolet radiation Patent
 [NASA-CASE-ERC-10034] c15 N71-24896
 Method for detecting leaks in hermetically
 sealed containers Patent
 [NASA-CASE-ERC-10045] c15 N71-24910
 Satellite aided vehicle avoidance system Patent
 [NASA-CASE-ERC-10090] c21 N71-24948
 Transverse piezoresistance and pinch effect
 electromechanical transducers Patent
 [NASA-CASE-ERC-10088] c26 N71-25490
 A solid state acoustic variable time delay line
 Patent
 [NASA-CASE-ERC-10032] c10 N71-25900
 Method and means for recording and
 reconstructing holograms without use of a
 reference beam Patent
 [NASA-CASE-ERC-10020] c16 N71-26154
 Electromechanical control actuator system Patent
 [NASA-CASE-ERC-10022] c15 N71-26635
 Method and apparatus for detecting gross leaks
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 [NASA-CASE-ERC-10033] c14 N71-26672
 Field ionization electrodes Patent
 [NASA-CASE-ERC-10013] c09 N71-26678
 Voltage regulator Patent
 [NASA-CASE-ERC-10113] c09 N71-27053
 A multichannel photoionization chamber for
 absorption analysis Patent
 [NASA-CASE-ERC-10044-1] c14 N71-27090
 Pressure sensitive transducers Patent
 [NASA-CASE-ERC-10087] c14 N71-27334
 Constant frequency output two stage induction
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 [NASA-CASE-ERC-10065] c09 N71-27364
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 [NASA-CASE-ERC-10097] c15 N71-28465
 Color television systems using a single gun
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 [NASA-CASE-ERC-10098] c09 N71-28618
 Ion microprobe mass spectrometer for analyzing
 fluid materials Patent
 [NASA-CASE-ERC-10014] c14 N71-28863
 Orifice gross leak tester Patent
 [NASA-CASE-ERC-10150] c14 N71-28992
 Device for measuring light scattering wherein
 the measuring beam is successively reflected
 between a pair of parallel reflectors Patent
 [NASA-CASE-XER-11203] c14 N71-28994
 Quasi-optical microwave component Patent
 [NASA-CASE-ERC-10011] c07 N71-29065
 Multiple hologram recording and readout system
 Patent
 [NASA-CASE-ERC-10151] c16 N71-29131
 Plasma fluidic hybrid display Patent
 [NASA-CASE-ERC-10100] c09 N71-33519
 Optical systems having spatially invariant outputs
 [NASA-CASE-ERC-10248] c14 N72-17323
 Method of detecting impending saturation of
 magnetic cores
 [NASA-CASE-ERC-10089] c23 N72-17747
 Improved satellite aided vehicle avoidance system
 [NASA-CASE-ERC-10419] c21 N72-21631
 Logarithmic function generator utilizing an
 exponentially varying signal in an inverse
 manner
 [NASA-CASE-ERC-10267] c09 N72-23173
 Method and apparatus for limiting field emission
 current
 [NASA-CASE-ERC-10015-2] c10 N72-27246
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 Rocket chamber leak test fixture
 [NASA-CASE-XPR-09479] c14 N69-27503
 Three axis controller Patent
 [NASA-CASE-XPR-00181] c21 N70-33279
 Catalyst bed removing tool Patent
 [NASA-CASE-XPR-00811] c15 N70-36901
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 [NASA-CASE-XPR-04104] c03 N70-42073
 Controlled visibility device for an aircraft
 Patent
 [NASA-CASE-XPR-04147] c11 N71-10748
 Biomedical electrode arrangement Patent
 [NASA-CASE-XPR-10856] c05 N71-11189
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 [NASA-CASE-PRC-10063] c01 N71-12217
 Energy management system for glider type vehicle
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 [NASA-CASE-XPR-00756] c02 N71-13421
 Quick attach mechanism Patent
 [NASA-CASE-XPR-05421] c15 N71-22994
 Heat flux measuring system Patent
 [NASA-CASE-XPR-03802] c33 N71-23085
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 [NASA-CASE-XPR-05302] c15 N71-23254
 Traversing probe Patent
 [NASA-CASE-XPR-02007] c12 N71-24692
 Layout tool Patent
 [NASA-CASE-PRC-10005] c15 N71-26145
 Pulsed excitation voltage circuit for transducers
 [NASA-CASE-PRC-10036] c09 N72-22200
 Acoustical transducer calibrating system and
 apparatus
 [NASA-CASE-PRC-10060-1] c14 N73-27379
 Three-axis adjustable loading structure
 [NASA-CASE-PRC-10051-1] c14 N74-13129
 Terminal guidance system
 [NASA-CASE-PRC-10049-1] c21 N74-13420
 Full wave modulator-demodulator amplifier
 apparatus
 [NASA-CASE-PRC-10072-1] c09 N74-14939
 Rotating raster generator
 [NASA-CASE-PRC-10071-1] c07 N74-20813
 An improved fifth wheel
 [NASA-CASE-PRC-10081-1] c37 N75-29432
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GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.
 Regulated dc to dc converter
 [NASA-CASE-XGS-03429] c03 N69-21330
 Apparatus for measuring swelling characteristics
 of membranes
 [NASA-CASE-XGS-03865] c14 N69-21363
 Tumbler system to provide random motion
 [NASA-CASE-XGS-02437] c15 N69-21472
 Automatic acquisition system for phase-lock loop
 [NASA-CASE-XGS-04994] c09 N69-21543
 Low power drain semi-conductor circuit
 [NASA-CASE-XGS-04999] c09 N69-24317
 Spacecraft battery seals
 [NASA-CASE-XGS-03864] c15 N69-24320
 Scanning aspect sensor employing an apertured
 disc and a commutator
 [NASA-CASE-XGS-08266] c14 N69-27432
 Monopulse system with an electronic scanner
 [NASA-CASE-XGS-05582] c07 N69-27460
 Ring counter
 [NASA-CASE-XGS-03095] c09 N69-27463
 Retrodirective optical system
 [NASA-CASE-XGS-04480] c16 N69-27491
 Time division multiplex system
 [NASA-CASE-XGS-05918] c07 N69-39974
 Doppler frequency spread correction device for
 multiplex transmissions
 [NASA-CASE-XGS-02749] c07 N69-39978
 Alkali-metal silicate protective coating
 [NASA-CASE-XGS-04119] c18 N69-39979
 Device for measuring electron-beam intensities
 and for subjecting materials to electron
 irradiation in an electron microscope
 [NASA-CASE-XGS-01725] c14 N69-39982
 Light sensitive digital aspect sensor Patent
 [NASA-CASE-XGS-00359] c14 N70-34158
 Method and apparatus for determining satellite
 orientation utilizing spatial energy sources
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 [NASA-CASE-XGS-00466] c21 N70-34297
 Binary magnetic memory device Patent
 [NASA-CASE-XGS-00174] c08 N70-34743
 Full binary adder Patent
 [NASA-CASE-XGS-00689] c08 N70-34787
 Ultra-long monostable multivibrator employing
 bistable semiconductor switch to allow
 charging of timing circuit Patent
 [NASA-CASE-XGS-00381] c09 N70-34819
 Controlled caging and uncaging mechanism Patent
 Application
 [NASA-CASE-GSC-11063-1] c03 N70-35584
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 [NASA-CASE-XGS-00260] c31 N70-37924
 Variable frequency magnetic multivibrator Patent
 [NASA-CASE-XGS-00458] c09 N70-38604
 Switching mechanism with energy storage means
 Patent
 [NASA-CASE-XGS-00473] c03 N70-38713

Variable frequency magnetic multivibrator Patent [NASA-CASE-XGS-00131]	c09 N70-38995	Ellipsoidal mirror reflectometer including means for averaging the radiation reflected from the sample Patent [NASA-CASE-XGS-05291]	c23 N71-16341
Stretch de-spin mechanism Patent [NASA-CASE-XGS-00619]	c30 N70-40016	Angular position and velocity sensing apparatus Patent [NASA-CASE-XGS-05680]	c14 N71-17585
Folding boom assembly Patent [NASA-CASE-XGS-00938]	c32 N70-41367	Apparatus for controlling the velocity of an electromechanical drive for interferometers and the like Patent [NASA-CASE-XGS-03532]	c14 N71-17627
Cryogenic connector for vacuum use Patent [NASA-CASE-XGS-02441]	c15 N70-41629	Omni-directional anisotropic molecular trap Patent [NASA-CASE-XGS-00783]	c30 N71-17788
Endless tape cartridge Patent [NASA-CASE-XGS-00769]	c14 N70-41647	Method of making tubes Patent [NASA-CASE-XGS-04175]	c15 N71-18579
Apparatus for producing three-dimensional recordings of fluorescence spectra Patent [NASA-CASE-XGS-01231]	c14 N70-41676	Pulse-type magnetic core memory element circuit with blocking oscillator feedback Patent [NASA-CASE-XGS-03303]	c08 N71-18595
Method and apparatus for determining electromagnetic characteristics of large surface area passive reflectors Patent [NASA-CASE-XGS-02608]	c07 N70-41678	Ripple add and ripple subtract binary counters Patent [NASA-CASE-XGS-04766]	c08 N71-18602
Prevention of pressure build-up in electrochemical cells Patent [NASA-CASE-XGS-01419]	c03 N70-41864	Computing apparatus Patent [NASA-CASE-XGS-04765]	c08 N71-18693
Variable time constant smoothing circuit Patent [NASA-CASE-XGS-01983]	c10 N70-41964	Stepping motor control circuit Patent [NASA-CASE-XGS-10366-1]	c10 N71-18772
Endless tape transport mechanism Patent [NASA-CASE-XGS-01223]	c07 N71-10609	Traffic control system and method Patent [NASA-CASE-XGS-10087-1]	c02 N71-19287
Reversible ring counter employing cascaded single SCR stages Patent [NASA-CASE-XGS-01473]	c09 N71-10673	Apparatus for measuring current flow Patent [NASA-CASE-XGS-02439]	c14 N71-19431
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[NASA-CASE-MSC-14795-1] c27 N76-15314

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		Impact simulator Patent [NASA-CASE-XLA-00493]	c11 N70-34786
		Accelerometer with FM output Patent [NASA-CASE-XLA-00492]	c14 N70-34799
		Frangible tube energy dissipation Patent [NASA-CASE-XLA-00754]	c15 N70-34850
		Landing arrangement for aerial vehicle Patent [NASA-CASE-XLA-00806]	c02 N70-34858

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[NASA-CASE-LAR-11522-1]	c15 N74-34881	[NASA-CASE-LAR-11263-1]	c35 N75-33369
Apparatus for microbiological sampling		Magnetometer	
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Method for continuous variation of propellant flow and thrust in propulsive devices Patent
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Apparatus for increasing ion engine beam density Patent
[NASA-CASE-XLE-00519] c28 N70-41576

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[NASA-CASE-XLE-00620] c32 N70-41579

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Method of making a regeneratively cooled combustion chamber Patent
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Instrument for the quantitative measurement of radiation at multiple wave lengths Patent
[NASA-CASE-XLE-00011] c14 N70-41946

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Apparatus for positioning and loading a test specimen Patent
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Liquid flow sight assembly Patent
[NASA-CASE-XLE-02998] c14 N70-42074

Inductive liquid level detection system Patent
[NASA-CASE-XLE-01609] c14 N71-10500

Method of forming thin window drifted silicon charged particle detector Patent
[NASA-CASE-XLE-00808] c24 N71-10560

Electrostatic thruster with improved insulators Patent
[NASA-CASE-XLE-01902] c28 N71-10574

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[NASA-CASE-XLE-04677] c15 N71-10577

Method of making a silicon semiconductor device Patent
[NASA-CASE-XLE-02792] c26 N71-10607

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[NASA-CASE-XLE-01765] c18 N71-10772

Molecular beam velocity selector Patent
[NASA-CASE-XLE-01533] c11 N71-10777

Meteoroid sensing apparatus having a coincidence network connected to a pair of capacitors Patent
[NASA-CASE-XLE-01246] c14 N71-10797

Capacitor and method of making same Patent
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Capillary radiator Patent
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[NASA-CASE-XLE-01988] c27 N71-15634

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[NASA-CASE-XLE-01182] c27 N71-15635

Automatically deploying nozzle exit cone extension Patent
[NASA-CASE-XLE-01640] c31 N71-15637

High temperature cobalt-base alloy Patent
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Method of making a rocket motor casing Patent
[NASA-CASE-XLE-00409] c28 N71-15658

Rocket motor casing Patent
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Electrostatic ion rocket engine Patent
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High temperature cobalt-base alloy Patent
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Nickel-base alloy containing Mo-W-Al-Cr-Ta-Zr-C-Nb-B Patent
[NASA-CASE-XLE-02082] c17 N71-16026

Method of improving the reliability of a rolling element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052

Process of casting heavy slips Patent
[NASA-CASE-XLE-00106] c15 N71-16076

Boiler for generating high quality vapor Patent
[NASA-CASE-XLE-00785] c33 N71-16104

Method of making self lubricating fluoride-metal composite materials Patent
[NASA-CASE-XLE-08511-2] c18 N71-16105

Thrust and direction control apparatus Patent
[NASA-CASE-XLE-03583] c31 N71-17629

Linear magnetic brake with two windings Patent
[NASA-CASE-XLE-05079] c15 N71-17652

Method of lubricating rolling element bearings Patent
[NASA-CASE-XLE-09527] c15 N71-17688

Hot wire liquid level detector for cryogenic fluids Patent
[NASA-CASE-XLE-00454] c23 N71-17802

Pulsed differential comparator circuit Patent
[NASA-CASE-XLE-03804] c10 N71-19471

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[NASA-CASE-XLE-05130-2] c15 N71-19570

Generator for a space power system Patent
[NASA-CASE-XLE-04250] c09 N71-20446

Method of making electrical contact on silicon solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492

Small plasma probe Patent
[NASA-CASE-XLE-02578] c25 N71-20747

Combined electrolysis device and fuel cell and method of operation Patent
[NASA-CASE-XLE-01645] c03 N71-20904

Pressure monitoring with a plurality of ionization gauges controlled at a central location Patent
[NASA-CASE-XLE-00787] c14 N71-21090

Control of transverse instability in rocket combustors Patent
[NASA-CASE-XLE-04603] c33 N71-21507

High voltage divider system Patent
[NASA-CASE-XLE-02008] c09 N71-21583

Plasma device feed system Patent
[NASA-CASE-XLE-02902] c25 N71-21694

Burning rate control of solid propellants Patent
[NASA-CASE-XLE-03494] c27 N71-21819

Protective device for machine and metalworking tools Patent
[NASA-CASE-XLE-01092] c15 N71-22797

Cryogenic insulation system Patent
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Method for producing fiber reinforced metallic composites Patent
[NASA-CASE-XLE-03925] c18 N71-22894

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Arc electrode of graphite with ball tip Patent
[NASA-CASE-XLE-04788] c09 N71-22987

Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Automatic recording McLeod gauge Patent
[NASA-CASE-XLE-03280] c14 N71-23093

Electronic cathode having a brush-like structure and a relatively thick oxide emissive coating Patent
[NASA-CASE-XLE-04501] c09 N71-23190

High temperature ferromagnetic cobalt-base alloy Patent
[NASA-CASE-XLE-03629] c17 N71-23248

Induction furnace with perforated tungsten foil shielding Patent
[NASA-CASE-XLE-04026] c14 N71-23267

Gd or Sm doped silicon semiconductor composition Patent
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Protection of serially connected solar cells against open circuits by the use of shunting diode Patent
[NASA-CASE-XLE-04535] c03 N71-23354

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Silicon solar cell with cover glass bonded to cell by metal pattern Patent

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Thermionic converter with current augmented by self induced magnetic field Patent		[NASA-CASE-LEW-11005-1]	c09 N72-21243
[NASA-CASE-XLE-01903]	c22 N71-23599	Saturation current protection apparatus for saturable core transformers	
Semiconductor material and method of making same Patent		[NASA-CASE-ERC-10075-2]	c09 N72-22196
[NASA-CASE-XLE-02798]	c26 N71-23654	Pulse coupling circuit	
Insulation system Patent		[NASA-CASE-LEW-10433-1]	c09 N72-22197
[NASA-CASE-XLE-02647]	c18 N71-23658	Solid state remote circuit selector switch	
Self-lubricating fluoride metal composite materials Patent		[NASA-CASE-LEW-10387]	c09 N72-22201
[NASA-CASE-XLE-08511]	c18 N71-23710	Load-insensitive electrical device	
Alloys for bearings Patent		[NASA-CASE-XER-11046]	c09 N72-22203
[NASA-CASE-XLE-05033]	c15 N71-23810	High speed rolling element bearing	
Extrusion die for refractory metals Patent		[NASA-CASE-LEW-10856-1]	c15 N72-22490
[NASA-CASE-XLE-06773]	c15 N71-23817	Production of metal powders	
Combustion chamber Patent		[NASA-CASE-XLE-06461]	c17 N72-22530
[NASA-CASE-XLE-04857]	c28 N71-23968	Nickel base alloy	
Metallic film diffusion for boundary lubrication Patent		[NASA-CASE-LEW-10874-1]	c17 N72-22535
[NASA-CASE-XLE-10337]	c15 N71-24046	Ion thruster magnetic field control	
Process for producing dispersion strengthened nickel with aluminum Patent		[NASA-CASE-LEW-10835-1]	c28 N72-22771
[NASA-CASE-XLE-04969]	c17 N71-24142	Electrically conductive fluorocarbon polymer	
Thermal radiation shielding Patent		[NASA-CASE-XLE-06774-2]	c06 N72-25150
[NASA-CASE-XLE-03432]	c33 N71-24145	Analog Signal to Discrete Time Interval Converter (ASDTIC)	
Method of attaching a cover glass to a silicon solar cell Patent		[NASA-CASE-ERC-10048]	c09 N72-25251
[NASA-CASE-XLE-08569-2]	c03 N71-24681	Controllable load insensitive power converters	
Rocket engine injector Patent		[NASA-CASE-ERC-10268]	c09 N72-25252
[NASA-CASE-XLE-03157]	c28 N71-24736	Angular velocity and acceleration measuring apparatus	
Multialarm summary alarm Patent		[NASA-CASE-ERC-10292]	c14 N72-25410
[NASA-CASE-XLE-03061-1]	c10 N71-24798	Electrical insulating layer process	
Apparatus for making curved reflectors Patent		[NASA-CASE-LEW-10489-1]	c15 N72-25447
[NASA-CASE-XLE-08917-2]	c15 N71-24836	Method for producing dispersion strengthened alloys by converting metal to a halide, comminuting, reducing the metal halide to the metal and sintering	
Flow angle sensor and read out system Patent		[NASA-CASE-LEW-10450-1]	c15 N72-25448
[NASA-CASE-XLE-04503]	c14 N71-24864	Selective nickel deposition	
Shock tube powder dispersing apparatus Patent		[NASA-CASE-LEW-10965-1]	c15 N72-25452
[NASA-CASE-XLE-04946]	c17 N71-24911	Method of making fiber composites	
Pneumatic oscillator Patent		[NASA-CASE-LEW-10424-2-2]	c18 N72-25539
[NASA-CASE-LEW-10345-1]	c10 N71-25899	Electricity measurement devices employing liquid crystalline materials	
Heat activated cell with alkali anode and alkali salt electrolyte Patent		[NASA-CASE-ERC-10275]	c26 N72-25680
[NASA-CASE-LEW-11358]	c03 N71-26084	Ablative system	
Method of producing refractory composites containing tantalum carbide, hafnium carbide, and hafnium boride Patent		[NASA-CASE-LEW-10359]	c33 N72-25911
[NASA-CASE-XLE-03940]	c18 N71-26153	Inductance device with vacuum insulation	
Ion beam deflector Patent		[NASA-CASE-LEW-10330-1]	c09 N72-27226
[NASA-CASE-LEW-10689-1]	c28 N71-26173	Apparatus for sensing temperature	
Rolling element bearings Patent		[NASA-CASE-XLE-05230]	c14 N72-27410
[NASA-CASE-XLE-09527-2]	c15 N71-26189	Apparatus for producing metal powders	
Ion thruster accelerator system Patent		[NASA-CASE-XLE-06461-2]	c17 N72-28535
[NASA-CASE-LEW-10106-1]	c28 N71-26642	Refractory metal base alloy composites	
Propellant feed isolator Patent		[NASA-CASE-XLE-03940-2]	c17 N72-28536
[NASA-CASE-LEW-10210-1]	c28 N71-26781	Apparatus for producing high purity I-123	
Heat activated cell Patent		[NASA-CASE-LEW-10518-2]	c24 N72-28714
[NASA-CASE-LEW-11359]	c03 N71-28579	Spiral groove seal	
Process for glass coating an ion accelerator grid Patent		[NASA-CASE-XLE-10326-2]	c15 N72-29488
[NASA-CASE-LEW-10278-1]	c15 N71-28582	Production of high purity I-123	
Fluid jet amplifier Patent		[NASA-CASE-LEW-10518-1]	c24 N72-33681
[NASA-CASE-XLE-09341]	c12 N71-28741	Electrostatic collector for charged particles	
Gas core nuclear reactor Patent		[NASA-CASE-LEW-11192-1]	c09 N73-13208
[NASA-CASE-LEW-10250-1]	c22 N71-28759	Method of making apparatus for sensing temperature	
Gas turbine combustor Patent		[NASA-CASE-XLE-05230-2]	c14 N73-13417
[NASA-CASE-LEW-10286-1]	c28 N71-28915	Method of forming superalloys	
Cyclic switch Patent		[NASA-CASE-LEW-10805-1]	c15 N73-13465
[NASA-CASE-LEW-10155-1]	c09 N71-29035	Rocket thrust throttling system	
Temperature reducing coating for metals subject to flame exposure Patent		[NASA-CASE-LEW-10374-1]	c28 N73-13773
[NASA-CASE-XLE-00035]	c33, N71-29151	Gas turbine engine fuel control	
Liquid spray cooling method Patent		[NASA-CASE-LEW-11187-1]	c28 N73-19793
[NASA-CASE-XLE-00027]	c33 N71-29152	Method of producing I-123	
Turbo-machine blade vibration damper Patent		[NASA-CASE-LEW-11390-2]	c24 N73-20763
[NASA-CASE-XLE-00155]	c28 N71-29154	Thermocouple tape	
Corrosion resistant beryllium Patent		[NASA-CASE-LEW-11072-1]	c14 N73-24472
[NASA-CASE-LEW-10327]	c17 N71-33408	Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias	
Integrated thermoelectric generator/space antenna combination		[NASA-CASE-LEW-10920-1]	c17 N73-24569
[NASA-CASE-XER-09521]	c09 N72-12136	Magneto-plasma-dynamic arc thruster	
Sensing probe		[NASA-CASE-LEW-11180-1]	c25 N73-25760
[NASA-CASE-LEW-10281-1]	c14 N72-17327	Ablative system	
Method of making emf cell		[NASA-CASE-LEW-10359-2]	c33 N73-25952
[NASA-CASE-LEW-11359-2]	c03 N72-20034	Parasitic suppressing circuit	
		[NASA-CASE-ERC-10403-1]	c10 N73-26228
		Twisted multifilament superconductor	
		[NASA-CASE-LEW-11726-1]	c26 N73-26752
		Ophthalmic method and apparatus	
		[NASA-CASE-LEW-11669-1]	c05 N73-27062

Rocket propellant injection
[NASA-CASE-LEW-11071-1] c27 N73-27695

Single grid accelerator for an ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids
[NASA-CASE-LEW-11325-1] c06 N73-27980

Production of I-123
[NASA-CASE-LEW-11390-3] c11 N73-28128

Method and apparatus for measuring electromagnetic radiation
[NASA-CASE-LEW-11159-1] c14 N73-28488

Welding blades to rotors
[NASA-CASE-LEW-10533-1] c15 N73-28515

An ion exchange nuclear reactor
[NASA-CASE-LEW-11645-2] c22 N73-28660

Low mass rolling element for bearings
[NASA-CASE-LEW-11087-1] c15 N73-30458

Swirl can primary combustor
[NASA-CASE-LEW-11326-1] c23 N73-30665

Enhanced diffusion welding
[NASA-CASE-LEW-11388-1] c15 N73-32358

High speed hybrid bearing comprising a fluid bearing and a rolling bearing convected in series
[NASA-CASE-LEW-11152-1] c15 N73-32359

Nickel aluminide coated low alloy stainless steel
[NASA-CASE-LEW-11267-1] c17 N73-32414

Cobalt-base alloy
[NASA-CASE-LEW-10436-1] c17 N73-32415

Nuclear fuel elements
[NASA-CASE-XLE-00209] c22 N73-32528

Method of fabricating a twisted composite superconductor
[NASA-CASE-LEW-11015] c26 N73-32571

Space vehicle with artificial gravity and earth-like environment
[NASA-CASE-LEW-11101-1] c31 N73-32750

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[NASA-CASE-LEW-11026-1] c15 N73-33383

Electron beam controller
[NASA-CASE-LEW-11617-1] c09 N74-10195

Spiral groove seal
[NASA-CASE-LEW-10326-3] c15 N74-10474

Apparatus for producing high purity I-123
[NASA-CASE-LEW-10518-3] c15 N74-10476

Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c17 N74-10521

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[NASA-CASE-LEW-10533-2] c15 N74-11300

High powered arc electrodes
[NASA-CASE-LEW-11162-1] c09 N74-12913

Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c15 N74-13179

Fine particulate capture device
[NASA-CASE-LEW-11583-1] c15 N74-13199

Deposition of alloy films
[NASA-CASE-LEW-11262-1] c18 N74-13270

Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c28 N74-13502

Method of making silicon solar cell array
[NASA-CASE-LEW-11069-1] c03 N74-14784

Spiral groove seal
[NASA-CASE-XLE-10326-4] c15 N74-15125

Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c15 N74-15128

Gas turbine exhaust nozzle
[NASA-CASE-LEW-11569-1] c28 N74-15453

Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c09 N74-17930

Diffusion welding in air
[NASA-CASE-LEW-11387-1] c15 N74-18128

Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c15 N74-18131

Fabrication of polyphenylquinoxaline composite articles by means of in situ polymerization of monomers
[NASA-CASE-LEW-11879-1] c18 N74-20152

Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646

Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c09 N74-20859

Electromagnetic flow rate meter
[NASA-CASE-LEW-10981-1] c14 N74-21018

Diffusion welding
[NASA-CASE-LEW-11388-2] c15 N74-21055

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[NASA-CASE-LEW-11076-1] c15 N74-21061

Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c15 N74-21063

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[NASA-CASE-LEW-11087-3] c15 N74-21064

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[NASA-CASE-XLE-04791] c14 N74-22096

Load insensitive electrical device
[NASA-CASE-XER-11046-2] c09 N74-22864

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[NASA-CASE-LEW-10199-1] c18 N74-23125

Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c02 N74-27490

High current electrical lead
[NASA-CASE-LEW-10950-1] c09 N74-27683

Magnetocaloric pump
[NASA-CASE-LEW-11672-1] c15 N74-27904

Supersonic fan blading
[NASA-CASE-LEW-11402-1] c28 N74-28226

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[NASA-CASE-LEW-10906-1] c06 N74-30502

Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c28 N74-31269

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[NASA-CASE-LEW-11118-1] c15 N74-32919

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[NASA-CASE-LEW-11076-2] c15 N74-32921

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[NASA-CASE-LEW-11549-1] c03 N74-33484

Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c09 N74-33740

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[NASA-CASE-LEW-11632-3] c14 N74-33944

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[NASA-CASE-LEW-12164-1] c16 N74-34010

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[NASA-CASE-LEW-12053-1] c06 N74-34579

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[NASA-CASE-LEW-11632-2] c35 N75-13213

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[NASA-CASE-LEW-11696-1] c37 N75-13261

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[NASA-CASE-LEW-11581-1] c54 N75-13531

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[NASA-CASE-LEW-11694-1] c20 N75-18310

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[NASA-CASE-LEW-11696-2] c26 N75-19408

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[NASA-CASE-LEW-12441-1] c34 N75-19580

High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c37 N75-21631

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[NASA-CASE-LEW-12444-1] c33 N75-25056

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[NASA-CASE-LEW-12245-1] c26 N75-26087

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[NASA-CASE-LEW-11949-1] c37 N75-26378

High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364

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[NASA-CASE-LEW-11881-1] c33 N75-28316

Combination automatic-starting electrical plasma torch and gas shutoff valve
[NASA-CASE-XLE-10717] c37 N75-29426

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[NASA-CASE-LEW-12078-1] c35 N75-30503

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[NASA-CASE-LEW-11076-3] c37 N75-30562

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[NASA-CASE-LEW-11227-1] c73 N75-30876

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[NASA-CASE-LEW-11925-1] c37 N75-31446

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 [NASA-CASE-LEW-11593-1] c20 N76-14190
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 [NASA-CASE-LEW-11118-2] c20 N76-14191
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 [NASA-CASE-LEW-11694-2] c37 N76-14461
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 [NASA-CASE-LEW-11938-1] c33 N76-15373
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 [NASA-CASE-LEW-11866-1] c72 N76-15860
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 [NASA-CASE-LEW-12619-1] c24 N76-16181
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 [NASA-CASE-LEW-12095-1] c26 N76-17233
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 [NASA-CASE-LEW-12083-1] c26 N76-18262
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 [NASA-CASE-LEW-11860-1] c37 N76-18458
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 [NASA-CASE-LEW-12048-1] c20 N76-19227
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 [NASA-CASE-LEW-12174-1] c35 N76-19407
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 [NASA-CASE-LEW-11158-1] c37 N76-19440
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 [NASA-CASE-LEW-12363-1] c44 N76-19552
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 [NASA-CASE-LEW-12137-1] c20 N76-20215
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 [NASA-CASE-LEW-11981-1] c37 N76-20486
 Counter pumping debris excluder and separator
 [NASA-CASE-LEW-11855-1] c37 N76-20487
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 [NASA-CASE-LEW-12119-1] c37 N76-20488
 Method of constructing dished ion thruster grids
 to provide hole array spacing compensation
 [NASA-CASE-LEW-11876-1] c20 N76-21276

circuit boards and printed cable
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 Electrical connector Patent Application
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 Angular measurement system Patent
 [NASA-CASE-XMF-00447] c14 N70-33179
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 [NASA-CASE-XMF-00185] c21 N70-34539
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 Gravity device Patent
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 method of making the same Patent
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[NASA-CASE-XMF-00442] c31 N71-10747

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[NASA-CASE-XMF-03287] c15 N71-15607

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[NASA-CASE-XMF-04709] c15 N71-15609

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[NASA-CASE-XMF-00968] c28 N71-15660

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[NASA-CASE-XMF-03169] c31 N71-15675

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[NASA-CASE-XMF-03498] c15 N71-15986

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[NASA-CASE-XMF-01096] c10 N71-16030

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[NASA-CASE-FRC-10022] c12 N71-26546

Method of removing insulated material from insulated wires
[NASA-CASE-FRC-10038] c15 N72-20444

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[NASA-CASE-XMP-08651] c06 N71-11236

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[NASA-CASE-XMP-08655] c06 N71-11239

Azine polymers and process for preparing the same Patent
[NASA-CASE-XMP-08656] c06 N71-11242

Synthesis of polymeric schiff bases by reaction of acetals and azine compounds Patent
[NASA-CASE-XMP-08652] c06 N71-11243

Aromatic diamine-aromatic dialdehyde high molecular weight Schiff base polymers prepared in a monofunctional Schiff base Patent
[NASA-CASE-XMP-03074] c06 N71-24740

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OAKLAND UNIV., ROCHESTER, MICH.
An optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c13 N74-32780

OHIO STATE UNIV., COLUMBUS.
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330

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Instrumentation for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c35 N75-27334

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[NASA-CASE-ARC-10820-1] c54 N75-32766

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[NASA-CASE-XNP-02029] c14 N70-41955

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Method of forming transparent films of ZnO
[NASA-CASE-FRC-10019] c15 N73-12487

PENINSULAR CHEMRESEARCH, INC., GAINESVILLE, FLA.
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-NPO-10768] c06 N71-27254

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[NASA-CASE-NPO-10765] c06 N72-20121

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[NASA-CASE-NPO-10768-2] c06 N72-27144

Highly fluorinated polyurethanes
[NASA-CASE-NPO-10767-2] c06 N72-27151

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[NASA-CASE-MSC-12165-1] c07 N71-33696

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Mechanically extendible telescoping boom
[NASA-CASE-NPO-11118] c03 N72-25021

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[NASA-CASE-GSC-11046-1] c07 N73-28013

Amplitude steered array
[NASA-CASE-GSC-11446-1] c09 N74-20860

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Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N76-13701

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Liquid-gas separation system Patent
[NASA-CASE-XMS-01624] c15 N70-40062

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[NASA-CASE-XMS-01620] c23 N71-15673

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[NASA-CASE-XMS-01618] c14 N71-20741

Sealing member and combination thereof and method of producing said sealing member Patent
[NASA-CASE-XMS-01625] c15 N71-23022

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[NASA-CASE-MSC-13436-1] c05 N73-32015

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High speed binary to decimal conversion system Patent
[NASA-CASE-XGS-01230] c08 N71-19544

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Monopulse tracking system Patent
[NASA-CASE-XGS-01155] c10 N71-21483

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Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

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Bonding graphite with fused silver chloride
[NASA-CASE-XGS-00963] c15 N69-39735

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Water cooled contactor for anode in carbon arc mechanism
[NASA-CASE-XMS-03700] c15 N69-24266

Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318

Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323

Radiation resistant silicon semiconductor devices Patent
[NASA-CASE-XGS-07801] c09 N71-12513

GaAs solar detector using manganese as a doping agent Patent
[NASA-CASE-XNP-01328] c26 N71-18064

Thermocouple assembly Patent
[NASA-CASE-XNP-01659] c14 N71-23039

Method of erasing target material of a vidicon tube or the like Patent
[NASA-CASE-XNP-06028] c09 N71-23189

Transient augmentation circuit for pulse amplifiers Patent
[NASA-CASE-XNP-01068] c10 N71-28739

RADIO CORP. OF AMERICA, PRINCETON, N.J.
Connector strips-positive, negative and T tabs
[NASA-CASE-XGS-01395] c03 N69-21539

Solar cell including second surface mirrors Patent
[NASA-CASE-NPO-10109] c03 N71-11049

Collapsible reflector Patent
[NASA-CASE-YMS-03454] c09 N71-20658

Simple method of making photovoltaic junctions Patent
[NASA-CASE-XNP-01960] c09 N71-23027

Method of electrolytically binding a layer of semiconductors together Patent
[NASA-CASE-XNP-01959] c26 N71-23043

Method and apparatus for distillation of liquids Patent
[NASA-CASE-XNP-08124] c15 N71-27184

Maximum power point tracker Patent
[NASA-CASE-GSC-10376-1] c14 N71-27407

Method of changing the conductivity of vapor deposited gallium arsenide by the introduction of water into the vapor deposition atmosphere Patent
[NASA-CASE-XNP-01961] c26 N71-29156

Radial heat flux transformer
[NASA-CASE-NPO-10828] c33 N72-17948

Target acquisition antenna
[NASA-CASE-GSC-10064-1] c10 N72-22235

Method for distillation of liquids
[NASA-CASE-XNP-08124-2] c06 N73-13129

Hermetically sealed semiconductor
[NASA-CASE-GSC-10791-1] c15 N73-14469

Thermal flux transfer system
[NASA-CASE-NPO-12070-1] c28 N73-32606

Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c09 N74-20861

Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

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[NASA-CASE-XNP-03744] c10 N71-20448

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Laser Doppler system for measuring three dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-19212

Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028

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Apparatus for inspecting microfilm Patent
[NASA-CASE-MFS-20240] c14 N71-26788

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Coincidence apparatus for detecting particles
[NASA-CASE-XLA-07813] c14 N72-17328

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[NASA-CASE-XLA-04980] c09 N69-27422

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[NASA-CASE-XNP-07040] c08 N71-12500

Load cell protection device Patent
[NASA-CASE-XMS-06782] c32 N71-15974

Thermobulb mount Patent
[NASA-CASE-MPO-10158] c33 N71-16356

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[NASA-CASE-NPO-10122] c12 N71-17631

Temperature sensitive flow regulator Patent
[NASA-CASE-MFS-14259] c15 N71-19213

Hydrogen leak detection device Patent
[NASA-CASE-MFS-11537] c14 N71-20442

Technique of elbow bending small jacketed transfer lines Patent
[NASA-CASE-XNP-10475] c15 N71-24679

Gas liquefaction and dispensing apparatus Patent
[NASA-CASE-NPO-10070] c15 N71-27372

Locking device for turbine rotor blades Patent
[NASA-CASE-XNP-00816] c28 N71-28928

Laser camera and diffusion filter therefore Patent
[NASA-CASE-MPO-10417] c16 N71-33410

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[NASA-CASE-NPO-12000] c27 N72-25699

Hydrazinium nitroformate propellant with saturated polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764

Novel polymers and method of preparing same
[NASA-CASE-NPO-10998-1] c06 N73-32029

Internally supported flexible duct joint
[NASA-CASE-MFS-19193-1] c37 N75-19686

Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236

Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382

An improved accumulator
[NASA-CASE-MFS-19287-1] c34 N76-14418

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Aircraft mounted crash activated transmitter device
[NASA-CASE-MFS-16609-3] c09 N74-34647

Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N75-22119

Brazing alloy binder
[NASA-CASE-XMF-05868] c26 N75-27125

Brazing alloy composition
[NASA-CASE-XMF-06053] c26 N75-27126

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Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XMF-05882] c35 N75-27329

Externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460

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Flanged major modular assembly jug
[NASA-CASE-MSC-19372-1] c37 N75-11351

Load regulating latch
[NASA-CASE-MSC-19535-1] c37 N76-15463

Insulation for piping
[NASA-CASE-MSC-19523-1] c31 N76-16245

Mechanical sequencer
[NASA-CASE-MSC-19536-1] c37 N76-19439

Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554

ROPH CORP., CHULA VISTA, CALIF.
Method of forming shapes from planar sheets of thermosetting materials
[NASA-CASE-NPO-11036] c15 N72-24522

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[NASA-CASE-XNP-02092] c15 N70-42033

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[NASA-CASE-XMS-09352] c09 N71-23316

SANTA BARBARA RESEARCH CENTER, GOLETA, CALIF.
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[NASA-CASE-GSC-12032-2] c35 N76-19408

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System for measuring Reynolds stress in a turbulently flowing fluid
[NASA-CASE-ARC-10755-2] c34 N75-16770

Reversed cowl flap inlet thrust augmentor
[NASA-CASE-ARC-10754-1] c07 N75-24736

Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131

System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N76-19379

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[NASA-CASE-XLA-04143] c15 N71-17687

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[NASA-CASE-XLA-01494] c15 N71-24164

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Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N75-13534

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[NASA-CASE-KSC-10647-1] c10 N72-31273

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Phase detector assembly Patent
[NASA-CASE-XMF-00701] c09 N70-40272

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[NASA-CASE-HQN-10654-1] c16 N73-13489

Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c16 N74-11313

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Biomedical radiation detecting probe Patent
[NASA-CASE-XMS-01177] c05 N71-19440

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Growth of gallium nitride crystals
[NASA-CASE-LAR-11302-1] c25 N75-13054

Low cost substrates for polycrystalline solar cells
[NASA-CASE-GSC-12022-1] c44 N76-13597

SPACE SCIENCES, INC., WALTHAM, MASS.
Doppler shift system
[NASA-CASE-HQN-10740-1] c24 N74-19310

SPACE TECHNOLOGY LABS., INC., REDONDO BEACH, CALIF.
Method and apparatus for measuring potentials in plasmas Patent
[NASA-CASE-XLE-00821] c25 N71-15650

AC logic flip-flop circuits Patent
[NASA-CASE-IGS-00823] c10 N71-15910

Apparatus for field strength measurement of a space vehicle Patent
[NASA-CASE-XLE-00820] c14 N71-16014

Hermetically sealed explosive release mechanism Patent
[NASA-CASE-IGS-00824] c15 N71-16078

- Apparatus for measuring electric field strength on the surface of a model vehicle Patent [NASA-CASE-XLE-02038] c09 N71-16086
- Solar cell mounting Patent [NASA-CASE-XNP-00826] c03 N71-20895
- Prestressed refractory structure Patent [NASA-CASE-XNP-02888] c18 N71-21068
- Linear accelerator frequency control system Patent [NASA-CASE-XGS-05441] c10 N71-22962
- Fluid lubricant system Patent [NASA-CASE-XNP-03972] c15 N71-23048
- Compensating bandwidth switching transients in an amplifier circuit Patent [NASA-CASE-XNP-01107] c10 N71-28859
- SPACELABS, INC., VAN NUYS, CALIF.**
- Peak polarity selector Patent [NASA-CASE-PRC-10010] c10 N71-24862
- Respiration monitor [NASA-CASE-PRC-10012] c14 N72-17329
- SPACO, INC., HUNTSVILLE, ALA.**
- Sight switch using an infrared source and sensor Patent [NASA-CASE-XNP-03934] c09 N71-22985
- Method and device for detecting voids in low density material Patent [NASA-CASE-MFS-20044] c14 N71-28993
- SPECTRA-PHYSICS, INC., MOUNTAIN VIEW, CALIF.**
- Optically pumped resonance magnetometer for determining vectorial components in a spatial coordinate system Patent [NASA-CASE-XGS-04879] c14 N71-20428
- SPECTROLAB, INC., SYLMAR, CALIF.**
- Ultraviolet filter [NASA-CASE-XNP-02340] c23 N69-24332
- Central spar and module joint Patent [NASA-CASE-XNP-02341] c15 N71-21531
- Apparatus for applying cover slides [NASA-CASE-NPO-10575] c03 N72-25019
- SPERRY GYROSCOPE CO., GREAT NECK, N.Y.**
- Automatic gain control system [NASA-CASE-XMS-05307] c09 N69-24330
- SPERRY RAND CORP., ELUE BELL, PA.**
- Flipflop interrogator and bi-polar current driver Patent [NASA-CASE-XGS-03058] c10 N71-19547
- SPERRY RAND CORP., HUNTSVILLE, ALA.**
- Optical tracking mount Patent [NASA-CASE-MFS-14017] c14 N71-26627
- Collapsible antenna boom and transmission line Patent [NASA-CASE-MFS-20068] c07 N71-27191
- Device for handling printed circuit cards Patent [NASA-CASE-MFS-20453] c15 N71-29133
- Frequency division multiplex technique [NASA-CASE-KSC-10521] c07 N73-20176
- Device for configuring multiple leads [NASA-CASE-MFS-22133-1] c15 N74-26977
- Photovoltaic cell array [NASA-CASE-MFS-22458-1] c44 N75-22900
- System for enhancing tool-exchange capabilities of a portable wrench [NASA-CASE-MFS-22283-1] c37 N75-33395
- Remotely operable articulated manipulator [NASA-CASE-MFS-22707-1] c37 N76-15457
- SPERRY RAND CORP., PHOENIX, ARIZ.**
- Isolation coupling arrangement for a torque measuring system [NASA-CASE-XLA-04897] c15 N72-22482
- STANFORD RESEARCH INST., MENLO PARK, CALIF.**
- Automatic fault correction system for parallel signal channels Patent [NASA-CASE-XNP-03263] c09 N71-18843
- Mercury capillary interrupter Patent [NASA-CASE-XNP-02251] c12 N71-20896
- Magnetic power switch Patent [NASA-CASE-NPO-10242] c09 N71-24803
- Procedure and apparatus for determination of water in nitrogen tetroxide [NASA-CASE-NPO-10234] c06 N72-17094
- STANFORD UNIV., CALIF.**
- Active RC networks [NASA-CASE-ARC-10042-2] c10 N72-11256
- Multiloop RC active filter apparatus having low parameter sensitivity with low amplifier gain [NASA-CASE-ARC-10192] c09 N72-21245
- Spacecraft attitude control method and apparatus [NASA-CASE-HQN-10439] c21 N72-21624
- Laser system with an antiresonant optical ring [NASA-CASE-HQN-10844-1] c36 N75-19653
- Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility [NASA-CASE-HQN-10069] c33 N75-27251
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- RC networks and amplifiers employing the same [NASA-CASE-XAC-05462-2] c10 N72-17171
- STATE UNIV. OF IOWA, IOWA CITY.**
- Mixture separation cell Patent [NASA-CASE-XMS-02952] c18 N71-20742
- SYLVANIA ELECTRONIC SYSTEMS-CENTRAL, WILLIAMSVILLE, N.Y.**
- Acquisition and tracking system for optical radar [NASA-CASE-MFS-20125] c16 N72-13437
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- TAAG DESIGNS, INC., COLLEGE PARK, MD.**
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- Phototropic composition of matter [NASA-CASE-XGS-03736] c14 N72-22443
- TAPT BROADCASTING CORP., HOUSTON, TEX.**
- Television noise reduction device [NASA-CASE-MSC-12607-1] c32 N75-21485
- TAMARACK SCIENTIFIC CO., INC., ORANGE, CALIF.**
- Detector absorptivity measuring method and apparatus [NASA-CASE-LAR-10907-1] c35 N75-19629
- TECHNICOLOR, INC., PARANUS, N.J.**
- Automatic lightning detection and photographic system [NASA-CASE-KSC-10728-1] c14 N73-32319
- TECHNIDYNE, INC., WEST CHESTER, PA.**
- Methods and apparatus employing vibratory energy for wrenching Patent [NASA-CASE-MFS-20586] c15 N71-17686
- TECHNOLOGY, INC., HOUSTON, TEX.**
- Apparatus and method for processing Korotkov sounds [NASA-CASE-MSC-13999-1] c05 N74-26626
- TECHNOLOGY, INC., SAN ANTONIO, TEX.**
- Contourograph system for monitoring electrocardiograms [NASA-CASE-MSC-13407-1] c10 N72-20225
- Modification of the physical properties of freeze-dried rice [NASA-CASE-MSC-13540-1] c05 N72-33096
- TEGAL CORP., RICHMOND, CALIF.**
- Abrasion resistant coatings for plastic surfaces [NASA-CASE-ARC-10915-1] c27 N76-13292
- TELEDYNE BROWN ENGINEERING, HUNTSVILLE, ALA.**
- Self-recording portable soil penetrometer [NASA-CASE-MFS-20774] c14 N73-19420
- TEMPLE UNIV. RESEARCH INST., PHILADELPHIA, PA.**
- Barium release system [NASA-CASE-LAR-10670-1] c06 N73-30097
- Rocket having barium release system to create ion clouds in the upper atmosphere [NASA-CASE-LAR-10670-2] c31 N74-27360
- TEXAS INSTRUMENTS, INC., DALLAS.**
- Integrated circuit including field effect transistor and cermet resistor [NASA-CASE-GSC-10835-1] c09 N72-33205
- TEXAS TECHNOLOGICAL UNIV., LUBBOCK.**
- Insulated electrocardiographic electrodes [NASA-CASE-MSC-14339-1] c05 N75-24716
- TRANS-SONICS, INC., LEXINGTON, MASS.**
- Capacitive tank gaging apparatus being independent of liquid distribution [NASA-CASE-MFS-21629] c14 N72-22442
- TRIDENT ENGINEERING ASSOCIATES, INC., ANNAPOLIS, MD.**
- Spectroscope equipment using a slender cylindrical reflector as a substitute for a slit Patent [NASA-CASE-XGS-08269] c23 N71-26206
- TRW EQUIPMENT LABS., CLEVELAND, OHIO.**
- Pulsed energy power system Patent [NASA-CASE-MSC-13112] c03 N71-11057
- TRW SYSTEMS GROUP, REDONDO BEACH, CALIF.**
- Ablative resin Patent [NASA-CASE-XLE-05913] c33 N71-14032
- Passive caging mechanism Patent [NASA-CASE-GSC-10306-1] c15 N71-24694
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Booster tank system Patent
[NASA-CASE-MSC-12390] c27 N71-29155

Resonant infrasonic gauging apparatus
[NASA-CASE-MSC-11847-1] c14 N72-11363

Wide range analog-to-digital converter with a
variable gain amplifier
[NASA-CASE-NPO-11018] c08 N72-21200

System for preconditioning a combustible vapor
[NASA-CASE-NPO-12072] c28 N72-22772

Failsafe multiple transformer circuit
configuration
[NASA-CASE-NPO-11078] c09 N72-25262

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[NASA-CASE-NPO-11016] c08 N72-31226

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[NASA-CASE-NPO-13360-1] c37 N75-25185

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[NASA-CASE-MSC-13802-2] c35 N76-15431

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Electromechanical actuator
[NASA-CASE-XNP-05975] c15 N69-23185

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Patent
[NASA-CASE-XNP-09702] c15 N71-17654

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[NASA-CASE-XNP-09698] c15 N71-18580

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[NASA-CASE-XNP-09704] c12 N71-18615

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[NASA-CASE-NPO-10416] c12 N71-27332

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characteristics and flux distribution of
micrometeorites
[NASA-CASE-NPO-12127-1] c14 N74-13130

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[NASA-CASE-LEW-10199-1] c18 N74-23125

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refractory metal electrodes
[NASA-CASE-XGS-04554] c15 N69-39786

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[NASA-CASE-NPO-10440] c15 N72-21466

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rotating objects Patent
[NASA-CASE-MFS-11279] c16 N71-20400

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[NASA-CASE-XMP-00580] c11 N70-35383

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[NASA-CASE-XMS-06236] c14 N71-21007

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[NASA-CASE-XMS-09635] c05 N71-24623

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pressurized suit Patent
[NASA-CASE-XMS-09637] c05 N71-24730

Tertiary flow injection thrust vectoring system
Patent
[NASA-CASE-MFS-20831] c28 N71-29153

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[NASA-CASE-MSC-12397-1] c05 N72-25119

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[NASA-CASE-LAR-10900-1] c15 N74-23064

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[NASA-CASE-MFS-21462-1] c09 N74-14935

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[NASA-CASE-XMS-13052] c14 N71-20427

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convolute section
[NASA-CASE-MSC-12398] c05 N72-20098

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Solid propellant liner Patent
[NASA-CASE-XNP-09744] c27 N71-16392

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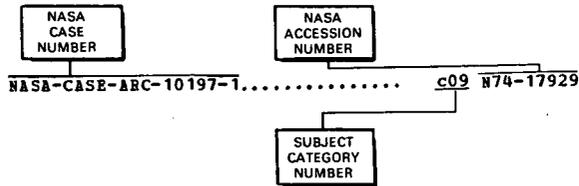
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