### ACCESSION NUMBER RANGES

<table>
<thead>
<tr>
<th>Bibliography Number</th>
<th>STAR Accession Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>NASA SP-7039(04)</td>
<td>N69-20701 – N73-33931</td>
</tr>
<tr>
<td>NASA SP-7039(12)</td>
<td>N74-10001 – N77-34042</td>
</tr>
<tr>
<td>NASA SP-7039(13)</td>
<td>N78-10001 – N78-22018</td>
</tr>
<tr>
<td>NASA SP-7039(14)</td>
<td>N78-22019 – N78-34034</td>
</tr>
<tr>
<td>NASA SP-7039(15)</td>
<td>N79-10001 – N79-21993</td>
</tr>
<tr>
<td>NASA SP-7039(16)</td>
<td>N79-21994 – N79-34158</td>
</tr>
<tr>
<td>NASA SP-7039(17)</td>
<td>N80-10001 – N80-22254</td>
</tr>
<tr>
<td>NASA SP-7039(18)</td>
<td>N80-22255 – N80-34339</td>
</tr>
<tr>
<td>NASA SP-7039(19)</td>
<td>N81-10001 – N81-21997</td>
</tr>
<tr>
<td>NASA SP-7039(20)</td>
<td>N81-21998 – N81-34139</td>
</tr>
<tr>
<td>NASA SP-7039(21)</td>
<td>N82-10001 – N82-22140</td>
</tr>
<tr>
<td>NASA SP-7039(22)</td>
<td>N82-22141 – N82-34341</td>
</tr>
<tr>
<td>NASA SP-7039(23)</td>
<td>N83-10001 – N83-23266</td>
</tr>
<tr>
<td>NASA SP-7039(24)</td>
<td>N83-23267 – N83-37053</td>
</tr>
<tr>
<td>NASA SP-7039(25)</td>
<td>N84-10001 – N84-22526</td>
</tr>
<tr>
<td>NASA SP-7039(26)</td>
<td>N84-22527 – N84-35284</td>
</tr>
</tbody>
</table>

This bibliography was prepared by the NASA Scientific and Technical Information Facility operated for the National Aeronautics and Space Administration by PRC Government Information Systems.
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 December 1984. This issue supersedes all previous Index Sections.
This supplement is available as NTISUB/111/093 from the National Technical Information Service (NTIS), Springfield, Virginia 22161 at the price of $20.00 domestic; $40.00 foreign for standing orders. Please note: Standing orders are subscriptions which do not terminate at the end of a year, as do regular subscriptions, but continue indefinitely unless specifically terminated by the subscriber.
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 1969. Thus a complete set of NASA PAB would consist of the Abstract Sections of Issue 04 (January 1974) and Issue 12 (January 1978) and the Abstract Section for all subsequent issues and the Index Section for the most recent issue.

The 172 citations published in this issue of the Abstract Section cover the period July 1984 through December 1984. The Index Section references over 4300 citations covering the period May 1969 through December 1984.

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 are depicted in the Typical Citation and Abstract reproduced on the following page and are also used in the indexes.
A cooling fluid is injected into a hot flowing gas through a passageway in a wall which contains and is subject to the hot gas. The passageway is slanted in a downstream direction at an acute angle to the wall. A cusp shape is provided in the passageway to generate vortices in the injected cooling fluid thereby reducing the energy extracted from the hot gas for that purpose. The cusp shape increases both film cooling effectiveness and wall area coverage. The cusp may be at either the downstream or upstream side of the passageway, the former substantially eliminating flow separation of the cooling fluid from the wall immediately downstream of the passageway.
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.

(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 Classification, (A) turn to the Patent Classification Number in the Number Index of Section 2 and find the associated invention(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 and Trademark Office, Washington, D.C. 20231, for fifty cents a copy. When ordering patents, the U.S. Patent Number should be used, and payment must be remitted in advance, preferably by money order or check payable to the Commissioner of Patents and Trademarks. Prepaid purchase coupons for ordering are also available from the Patent and Trademark Office.

NASA patent application specifications are sold in paper copy by the National Technical Information Service at price code A02 ($7.00 domestic; $14.00 foreign). Microfiche are sold at price code A01 ($4.50 domestic; $9.00 foreign). The US-Patent-Appl-SN-number should be used in ordering either paper copy or microfiche from NTIS.

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-4, 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.
PUBLIC COLLECTIONS OF NASA DOCUMENTS

DOMESTIC: NASA and NASA-sponsored documents and a large number of aerospace publications are available to the public for reference purposes at the library maintained by the American Institute of Aeronautics and Astronautics, Technical Information Service, 555 West 57th Street, 12th Floor, New York, New York 10019.

EUROPEAN: An extensive collection of NASA and NASA-sponsored publications is maintained by the British Library Lending Division, Boston Spa, Wetherby, Yorkshire, England for public access. The British Library Lending Division also has available many of the non-NASA publications cited in Star. European requesters may purchase facsimile copy or microfiche of NASA and NASA-sponsored documents, those identified by both the symbols # and * from ESA - Information Retrieval Service European Space Agency, 8-10 rue Mario-Nikis, 75738 Paris CEDEX 15, France.

FEDERAL DEPOSITORY LIBRARY PROGRAM

In order to provide the general public with greater access to U.S. Government publications, Congress established the Federal Depository Library Program under the Government Printing Office (GPO), with 50 regional depositories responsible for permanent retention of material, inter-library loan, and reference services. Over 1,300 other depositories also exist. A list of the regional GPO libraries appears on the inside back cover.
<table>
<thead>
<tr>
<th>NASA Case Number Prefix Letters</th>
<th>Address of Cognizant NASA Patent Counsel</th>
</tr>
</thead>
</table>
| ARC-xxxxx                       | Ames Research Center  
Mail Code: 200-11A  
Moffett Field, California 94035  
Telephone: (415)965-5104 |
| XAR-xxxxx                       | NASA Headquarters  
Mail Code: GP-4  
Washington, D.C. 20546  
Telephone: (202)755-3954 |
| ERC-xxxxx                       | Goddard Space Flight Center  
Mail Code: 204  
Greenbelt, Maryland 20771  
Telephone: (301)344-7351 |
| XER-xxxxx                       | John F. Kennedy Space Center  
Mail Code: PT-PAT  
Kennedy Space Center, Florida 32899  
Telephone: (305)867-2544 |
| HQN-xxxxx                       | Langley Research Center  
Mail Code: 279  
Hampton, Virginia 23365  
Telephone: (804)827-8725 |
| XHQ-xxxxx                       | Lewis Research Center  
Mail Code: 500-318  
21000 Brookpark Road  
Cleveland, Ohio 44135  
Telephone: (216)433-6346 |
| GSC-xxxxx                       | Lyndon B. Johnson Space Center  
Mail Code: AL3  
Houston, Texas 77058  
Telephone: (713)483-4871 |
| XGS-xxxxx                       | George C. Marshall Space Flight Center  
Mail Code: CC01  
Huntsville, Alabama 35812  
Telephone: (205)453-0020 |
| KSC-xxxxx                       | NASA Resident Legal Office  
Mail Code: 180-801  
4800 Oak Grove Drive  
Pasadena, California 91103  
Telephone: (213)354-2700 |
| XKS-xxxxx                       |                           |
PATENT LICENSING REGULATIONS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

14 CFR Part 1245

Licensing of NASA Inventions

AGENCY: National Aeronautics and Space Administration.

ACTION: Final rule with comment period.

SUMMARY: The National Aeronautics and Space Administration (NASA) is revising its patent licensing regulations to conform with Pub. L. 96-517. The interim regulation provides for the granting of federally owned inventions to the public, subject to the public interest. The final regulation provides for the granting of these inventions to the public, subject to the public interest, and includes provisions for the protection of the rights of the federal government and the public, as well as for the protection of the rights of the applicant and the public, as well as for the protection of the rights of the applicant and the public.

EFFECTIVE DATE: November 2, 1981. Comments must be received in writing by December 2, 1981. Unless a notice is published in the Federal Register after the comment period indicating changes to be made, this interim regulation shall become a final regulation.

ADDRESS: Mr. John G. Marron, Director of Patent Licensing, Governmental Affairs, Federal Register, Room 5E-121, 1300 Pennsylvania Avenue, N.W., Washington, D.C. 20546.

FOR FURTHER INFORMATION CONTACT: Mr. John G. Marron (202) 655-7954.

SUPPLEMENTARY INFORMATION:

PART 1245—PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS

Subpart 2—Licensing of NASA Inventions

1245.200 Scope of subpart.

This subpart prescribes the terms, conditions, and procedures upon which a NASA invention may be licensed. It does not affect licenses which (a) were in effect prior to July 1, 1981; (b) may exist at the time of the Government's acquisition of title to the invention, including those resulting from the allocation of rights to inventions made under Government research and development contracts; (c) are the result of an authorized exchange of rights in the settlement of patent disputes; or (d) are otherwise authorized by law or treaty.

1245.201 Policy and objective.

It is the policy and objective of this subpart to use the patent system to promote the utilization of inventions arising from NASA supported research and development.

1245.202 Definitions.

(a) "Federally owned invention" means an invention, plant, or drug which is covered by a patent or patent application in the United States or a patent, patent application, plant variety protection, or other form of protection in a foreign country to which it has been assigned to or otherwise vested in the United States Government.

(b) "Federal agency" means an executive department, military department, Government corporation, or independent establishment, except the Tennessee Valley Authority, which has custody of a Federally owned invention.

(c) "NASA invention" means a Federally owned invention with respect to which NASA maintains custody and administration in whole or in part, of the right to, or interest in such invention on behalf of the United States Government.

(d) "Small business firm" means a small business concern as defined at section 2 of Pub. L. 89-236 (15 U.S.C. 631) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of these regulations, the size standard for small business concerns involved in Government procurement, contained in 13 CFR 121.3-12, will be used.

(e) "Practical application" means to manufacture in the case of a composition or product, or to practice in the case of a process or method, or to operate in the case of a machine or system, and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

(f) "United States" means the United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.

1245.203 Authority to grant licenses.

NASA inventions shall be made available for licensing as deemed appropriate in the public interest. NASA may grant nonexclusive, partially exclusive, or exclusive licenses thereto under this subpart on inventions in its custody.

Restrictions and Conditions

1245.204 All licenses granted under this subpart.

(a) Restrictions (1) A license may be granted only if the applicant has supplied NASA with a satisfactory plan for development or marketing of the invention, or both, and with information about the applicant's capability to fulfill the plan.

(2) A license granting rights to use or sell under a NASA invention in the United States shall normally be granted only to a licensor who agrees that any product embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

(b) Conditions Licenses shall contain such terms and conditions as NASA determines are appropriate for the protection of the interests of the Federal Government and the public and are not in conflict with law or this subpart. The following terms and conditions apply to any license:

(1) The duration of the license shall be for a period specified in the license agreement, unless sooner terminated in accordance with this subpart.

(2) The license may be granted for all or less than all fields of use of the invention or in specified geographical areas, or both.

(3) The license may extend to subsidiaries of the licensee or other parties if provided for in the license but shall be nonassignable without approval of NASA, except to the successor of that party of the licensee's business to which the invention pertains.

(4) The license may provide the licensee the right to grant sublicenses under the license, subject to the approval of NASA. Each sublicense shall make reference to the license, including the rights retained by the Government, and a copy of such
sublicense shall be furnished to NASA.

(5) The license shall require the licensees to carry out the plan for development or marketing of the invention, or both, to bring the invention to practical application within a period specified in the license, and to continue to make the benefits of the invention reasonably accessible to the public.

(6) The license shall require the licensee to report periodically on the utilization or efforts at obtaining utilization that are being made by the licensee, with particular reference to the plan submitted.

(7) All licenses shall normally require royalty or other consideration.

(8) Where an agreement is obtained pursuant to § 1245.204(a)(2) that any products embodying the invention or produced through use of the invention will be manufactured substantially in the United States, the license shall recite such agreement.

(9) The license shall provide for the right of NASA to terminate the license, in whole or in part, if:

(i) NASA determines that the licensee is not executing the plans submitted with its request for a license and the licensee cannot otherwise demonstrate to the satisfaction of NASA that it has taken or can be expected to take within a reasonable time effective steps to achieve practical application of the invention;

(ii) NASA determines that such action is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license and such requirements are not reasonably satisfied by the licensee;

(iii) The licensee has willfully made a false statement of or willfully omitted a material fact in the license application or in any report required by the license agreement; or

(iv) The licensee commits a substantial breach of a covenant or agreement contained in the license.

(10) The license may be modified or terminated, consistent with this subpart, upon mutual agreement of NASA and the licensee.

(11) Nothing relating to the grant of a license, nor the grant itself, shall be construed to confer upon any person any immunity from or defenses under the antitrust laws or from a charge of patent misuse, and the acquisition and use of rights pursuant to this subpart shall not be immunized from the operation of state or Federal law by reason of the source of the grant.

Types of Licenses

§ 1245.205 Nonexclusive licenses.

(a) Availability of licenses. Nonexclusive licenses may be granted under NASA inventions without publication of availability or notice of a prospective license.

(b) Conditions. In addition to the provisions of § 1245.204, the nonexclusive license may also provide that, after termination of a period specified in the license agreement, NASA may restrict the license to the fields of use or geographic areas, or both, in which the licensee has brought the invention to practical application and continues to make the benefits of the invention reasonably accessible to the public. However, such restriction shall be made only in order to grant an exclusive or partially exclusive license in accordance with this subpart.

§ 1245.206 Exclusive and partially exclusive licenses.

(a) Domestic licenses.

(1) Availability of licenses. Exclusive or partially exclusive licenses may be granted on NASA inventions: (i) 3 months after notice of the availability has been announced in the Federal Register; or (ii) without such notice where NASA determines that expeditious granting of such a license will best serve the interests of the Federal Government and the public; and (iii) in either situation, specified in § 1245.204(a)(1)(i) or (ii) of this section only if:

[A] Notice of a prospective license, identifying the invention and the prospective licensee, has been published in the Federal Register, providing opportunity for filing written objections within a 60 day period;

[B] After expiration of the period in § 1245.204(a)(1)(ii)(A) consideration of any written objections received during the period. NASA has determined that:

[1] The interests of the Federal Government and the public will best be served by the proposed license, in view of the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public;

[2] The desired practical application has not been achieved, or is not likely expeditiously to be achieved, under any nonexclusive license which has been granted, or which may be granted, on the invention;

[3] Exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the investment of risk capital and expenditures to bring the invention to practical application or otherwise promote the invention's utilization by the public; and

(2) Conditions. In addition to the provisions of § 1245.204, the following terms and conditions apply to domestic exclusive and partially exclusive licenses:

(i) The license shall be subject to the irrevocable, royalty-free right of the Government of the United States to practice and have practiced the invention on behalf of the United States and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.

(ii) The license shall reserve to NASA the right to require the licensee to grant sublicenses to responsible applicants, on reasonable terms, when necessary to fulfill health or safety needs.

(iii) The license shall be subject to any licenses in force at the time of the grant of the exclusive or partially exclusive license.

(3) The proposed terms and scope of exclusivity are not greater than reasonably necessary to provide the incentive for bringing the invention to practical application or otherwise promote the invention's utilization by the public:

(C) NASA has not determined that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws; and

(D) NASA has given first preference to any small business firms submitting plans that are determined by the agency to be within the capabilities of the firms and as equally likely, if executed, to bring the invention to practical application as any plans submitted by applicants that are not small business firms.

(2) Conditions. In addition to the provisions of § 1245.204, the following terms and conditions apply to domestic exclusive and partially exclusive licenses:

(3) Exclusive or partially exclusive licenses may be granted on a NASA invention covered by a foreign patent, patent application, or other form of protection, provided that:

[i] Notice of a prospective license, identifying the invention and the prospective licensee, has been published in the Federal Register, providing opportunity for filing written objections
within a 60-day period and following consideration of such objections:

(ii) NASA has considered whether the interests of the Federal Government or United States industry in foreign commerce will be enhanced; and

(iii) NASA has not determined that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the United States in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with antitrust laws.

(2) Conditions. In addition to the provisions of § 1245.204, the following terms and conditions apply to foreign exclusive and partially exclusive licenses:

(i) The license shall be subject to the irrevocable, royalty-free right of the Government of the United States to practice and have practiced the invention on behalf of the United States and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.

(ii) The license shall be subject to any licenses in force at the time of the grant of the exclusive or partially exclusive license.

(iii) The license may grant the licensee the right to take any suitable and necessary actions to protect the licensed property, on behalf of the Federal Government.

(c) Record of determinations. NASA shall maintain a record of determinations to grant exclusive or partially exclusive licenses.

Procedures

§ 1245.207 Application for a license.

An application for a license should be addressed to the Patent Counsel at the NASA installation having responsibility for the invention and shall normally include:

(a) Identification of the invention for which the license is desired, including the patent application serial number or patent number, title, and date, if known;
(b) Identification of the type of license for which the application is submitted;
(c) Name and address of the person, company, or organization applying for the license and the citizenship or place of incorporation of the applicant;
(d) Name, address, and telephone number of representative of applicant to whom correspondence should be sent;
(e) Nature and type of applicant's business, identifying products or services which the applicant has successfully commercialized, and approximate number of applicant's employees;
(f) Source of information concerning the availability of a license on the invention;
(g) A statement indicating whether applicant is a small business firm as defined in § 1245.202(c);
(h) A detailed description of applicant's plan for development or marketing of the invention, or both, which should include:

(1) A statement of the time, nature and amount of anticipated investment of capital and other resources which applicant believes will be required to bring the invention to practical application;

(2) A statement as to applicant's capability and intention to fulfill the plan, including information regarding manufacturing, marketing, financial, and technical resources;

(3) A statement of the fields of use for which applicant intends to practice the invention;

(4) A statement of the geographic areas in which applicant intends to manufacture any products embodying the invention and geographic areas where applicant intends to use or sell the invention, or both;

(i) Identification of licenses previously granted to applicant under Federally owned inventions;

(j) A statement containing applicant's best knowledge of the extent to which the invention is being practiced by private industry or Government, or both, or is otherwise available commercially; and

(k) Any other information which applicant believes will support a determination to grant the license to applicant.

§ 1245.208 Processing applications.

(a) Applications for licenses will be initially reviewed by the Patent Counsel of the NASA installation having responsibility for the invention. The Patent Counsel shall make a preliminary recommendation to the Director of Licensing, NASA Headquarters, whether to:

(1) Grant the license as requested;

(2) Grant the license with modification after negotiation with the licensee, or

(3) Deny the license.

The Director of Licensing shall review the preliminary recommendation of the Patent Counsel and make a final recommendation to the NASA Assistant General Counsel for Patent Matters. Such review and final recommendation may include, and be based on, any additional information obtained from applicant and other sources that the Patent Counsel and the Director of Licensing deem relevant to the license requested. The determination to grant or deny the license shall be made by the Assistant General Counsel for Patent Matters based on the final recommendation of the Director of Licensing.

(b) When notice of a prospective exclusive or partially exclusive license is published in the Federal Register in accordance with § 1245.206(a)(1)(iii)(A) or § 1245.206(b)(1)(i), any written objections received in response thereto will be considered by the Director of Licensing in making the final recommendation to the Assistant General Counsel for Patent Matters.

(c) If the requested license, including any negotiated modifications, is denied by the Assistant General Counsel for Patent Matters, the applicant may request reconsideration by filing a written request for reconsideration within 30 days after receiving notice of denial. This 30-day period may be extended for good cause.

(d) In addition to, or in lieu of requesting reconsideration, the applicant may also appeal the denial of the license in accordance with § 1245.211.

§ 1245.209 Notice to Attorney General.

A copy of the notice provided for in §§ 1245.206(a)(1)(iii)(A) and 1245.206(b)(1)(i) will be sent to the Attorney General.

§ 1245.210 Modification and termination of licenses.

Before modifying or terminating a license, other than by mutual agreement, NASA shall furnish the licensee and any sublicensee of record a written notice of intention to modify or terminate the license, and the licensee and any sublicensee shall be allowed 30 days after such notice to remedy any breach of the license or show cause why the license should not be modified or terminated.

§ 1245.211 Appeals.

(a) The following parties may appeal to the NASA Administrator or designee any decision or determination concerning the grant, denial, interpretation, modification, or termination of a license:

(1) A person whose application for a license has been denied;

(2) A licensee whose license has been modified or terminated, in whole or in part; or

(3) A person who timely filed a written objection in response to the notice required by §§ 1245.206(a)(1)(iii)(A) or any other information which applicant believes will support a determination to grant the license to applicant.
PATENT LICENSING REGULATIONS

1245.206(b)(1)(i) and who can demonstrate to the satisfaction of NASA that such person may be damaged by the Agency action.

(b) Written notice of appeal must be filed within 30 days (or such other time as may be authorized for good cause shown) after receiving notice of the adverse decision or determination; including, an adverse decision following the request for reconsideration under § 1245.208(c). The notice of appeal, along with all supporting documentation should be addressed to the Administrator, National Aeronautics and Space Administration, Washington, DC 20546. Should the appeal raise a genuine dispute over material facts, fact-finding will be conducted by the NASA Inventions and Contributions Board. The person filing the appeal shall be afforded an opportunity to be heard and to offer evidence in support of the appeal. The Chairperson of the Inventions and Contributions Board shall prepare written findings of fact and transmit them to the Administrator or designee. The decision on the appeal shall be made by the NASA Administrator or designee. There is no further right of administrative appeal from the decision of the Administrator or designee.

§ 1245.212 Protection and administration of inventions.

NASA may take any suitable and necessary steps to protect and administer rights to NASA inventions, either directly or through contract.

§ 1245.213 Transfer of custody.

NASA having custody of certain Federally owned inventions may transfer custody and administration in whole or in part, to another Federal agency, of the right, title, or interest in any such invention.

§ 1245.214 Confidentiality of information.

Title 35, United States Code, section 209, provides that any plan submitted pursuant to § 1245.207(h) and any report required by § 1245.204(b)(6) may be treated by NASA as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of Title 5 of the United States Code.

James M. Beggs,
Administrator.
October 15, 1981.

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. For abstracts of NASA-owned inventions available for licensing in countries other than the United States, see NASA SP-7038, "Significant NASA Inventions Available for Licensing in Countries Other Than the United States." A copy of this NASA publication is available from NASA Headquarters, Code GP, Washington, D.C., 20546.
Subject Categories

(1969 – 1973)

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

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

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

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

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

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

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

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; hydromechanics; 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 cerments; 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 research 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 (1974 - )

#### 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 Aeronautics.

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 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 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 Aircraft Communications, Command and Tracking and 32 Communications.

05 AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes aircraft simulation technology.

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

06 AIRCRAFT INSTRUMENTATION

Includes cockpit and cabin display devices; and flight instruments.

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

17 SPACECRAFT COMMUNICATION, COMMAND AND TRACKING

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

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

18 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes spacecraft thermal and environmental control; and altitude control.

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

19 SPACECRAFT INSTRUMENTATION

For related information see also 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 Aircraft Propulsion and Power, 28 Propellants and Fuels, and 44 Energy Production and Conversion.
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEMISTRY AND MATERIALS</td>
<td>Includes chemistry and materials (general); composite materials; inorganic and physical chemistry; metallic materials; nonmetallic materials; and propellants and fuels.</td>
</tr>
<tr>
<td>CHEMISTRY AND MATERIALS (GENERAL)</td>
<td>Includes biochemistry and organic chemistry.</td>
</tr>
<tr>
<td>COMPOSITE MATERIALS</td>
<td>Includes laminates.</td>
</tr>
<tr>
<td>INORGANIC AND PHYSICAL CHEMISTRY</td>
<td>Includes chemical analysis, e.g., chromatography; combustion theory; electrochemistry; and photochemistry. For related information see also 77 Thermodynamics and Statistical Physics.</td>
</tr>
<tr>
<td>METALLIC MATERIALS</td>
<td>Includes physical, chemical, and mechanical properties of metals, e.g., corrosion; and metallurgy.</td>
</tr>
<tr>
<td>NONMETALLIC MATERIALS</td>
<td>Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials.</td>
</tr>
<tr>
<td>PROPELLANTS AND FUELS</td>
<td>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.</td>
</tr>
<tr>
<td>INSTRUMENTATION AND PHOTOGRAPHY</td>
<td>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.</td>
</tr>
<tr>
<td>LASERS AND MASERS</td>
<td>Includes parametric amplifiers.</td>
</tr>
<tr>
<td>MECHANICAL ENGINEERING</td>
<td>Includes auxiliary systems (non-power); machine elements and processes; and mechanical equipment.</td>
</tr>
<tr>
<td>QUALITY ASSURANCE AND RELIABILITY</td>
<td>Includes product sampling procedures and techniques; and quality control.</td>
</tr>
<tr>
<td>STRUCTURAL MECHANICS</td>
<td>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.</td>
</tr>
<tr>
<td>GEOSCIENCES</td>
<td>Includes geosciences (general); earth resources; energy production and conversion; environment pollution; geophysics; meteorology and climatology; and oceanography. For related information see also Space Sciences.</td>
</tr>
<tr>
<td>GEOENGINEERING</td>
<td>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.</td>
</tr>
<tr>
<td>COMMUNICATIONS</td>
<td>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.</td>
</tr>
<tr>
<td>ELECTRONICS AND ELECTRICAL ENGINEERING</td>
<td>Includes test equipment and maintainability; components, e.g., tunnel diodes and transistors; microminiarization; and integrated circuitry. For related information see also 60 Computer Operations and Hardware and 76 Solid-State Physics.</td>
</tr>
<tr>
<td>FLUID MECHANICS AND HEAT TRANSFER</td>
<td>Includes boundary layers; hydrodynamics; fluidics; mass transfer; and ablation cooling. For related information see also 02 Aerodynamics and 77 Thermodynamics and Statistical Physics.</td>
</tr>
<tr>
<td>GEOPHYSICS</td>
<td>Includes aeronomy; upper and lower atmosphere studies; ionospheric and magnetospheric physics; and geomagnetism. For space radiation see 93 Space Radiation.</td>
</tr>
<tr>
<td>METEOROLOGY AND CLIMATOLOGY</td>
<td>Includes weather forecasting and modification.</td>
</tr>
<tr>
<td>OCEANOGRAPHY</td>
<td>Includes biological, dynamic and physical oceanography; and marine resources.</td>
</tr>
</tbody>
</table>
**LIFE SCIENCES**
Includes 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 gravitation 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

Section 2 • Indexes

SUBJECT INDEX ................................................................. A-1
INVENTOR INDEX ............................................................. B-1
SOURCE INDEX ................................................................. C-1
CONTRACT NUMBER INDEX ............................................... D-1
NUMBER INDEX ............................................................... E-1
ACCESSION NUMBER INDEX .............................................. F-1
<table>
<thead>
<tr>
<th>SUBJECT HEADING</th>
<th>ABLATIVE SYSTEMS</th>
<th>ABLATIVE MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSORPTION CROSS SECTIONS</td>
<td>Penetrating radiation system for detecting the amount of liquid in a tank Patent</td>
<td>Method for making a heat insulating and ablative structure Patent</td>
</tr>
<tr>
<td>ABSORPTION SPECTRA</td>
<td>Stark effect spectrophotometer for continuous absorption spectra monitoring — a technique for gas analysis</td>
<td>Method for making a heat insulating and ablative structure Patent</td>
</tr>
<tr>
<td>ABRASION</td>
<td>Abrasion systems, Abrasion-resistant coatings, Abrasion-resistant polymer coated fabric</td>
<td>Abrasion systems, Abrasion-resistant coatings, Abrasion-resistant polymer coated fabric</td>
</tr>
<tr>
<td>ABSORPTION RESISTANCE</td>
<td>Process for producing a well-adhered durable optical coating on an optical plastic substrate — abrasion resistant polymethyl methacrylate lenses</td>
<td>Abrasion resistance, Abrasion-resistant coatings, Abrasion-resistant polymer coated fabric, Abrasion-resistant polymer coated fabric</td>
</tr>
</tbody>
</table>
AEROSPACE MEDICINE

Process for spinning flame retardant elastomeric compositions — fabricating symmetric fibers for high oxygen environments

[AIRAS-GSC-15000-1] c 27 N73-25047

General backup system-entire mechanical equipment and system—producing

[AIRAS-GSC-12500-1] c 27 N73-25047

AEROSPACE VEHICLES

Landing arrangement for a controlled transport vehicle Patent

[AIRAS-12500-1] c 27 N73-25047

Landing aid assembly for aeroespace vehicles Patent

[AIRAS-XMP-02352] c 31 N70-36545

Landing arrangement for aeroespace vehicle Patent

[AIRAS-XLA-00055] c 31 N70-36545

Fluxless connection of a supported and skin Patent

[AIRAS-XLA-01027] c 31 N70-24055

Nondestructive test method for titanium and titanium alloys

[AIRAS-LAR-10500-1] c 17 N73-12547

Aerospace vehicle

[AIRAS-LAR-13155-1] c 18 N84-20928

AEROSPACEPLANES

Multistage aerospace craft — perspective drawings of conceptual design

[AIRAS-XMP-02263] c 05 N74-10967

AFTERBURNER

Nascent afterbody for jet engines Patent

[AIRAS-XLA-10450-1] c 28 N71-21493

Revolving tail ball торque-type system — simulating bearing friction on canard controlled missiles

[AIRAS-LAR-12751-1] c 15 N84-16321

AFTFIREBURNER

Nozzle Patent

[AIRAS-XLA-000154] c 28 N70-33374

AEROSURFACE

Acoustic attenuation methods and apparatus

[AIRAS-XMP-03351] c 29 N75-29226

AGING (MATERIALS)

Method of heat treating age-hardened alloys

[AIRAS-XLA-01311] c 29 N75-29226

AGRICULTURE

Solar-powered pump

[AIRAS-LAR-10367-1] c 44 N78-29701

AILERONS

Control device Patent

[AIRAS-XAC-10016] c 15 N71-23809

AIR

Gas purged dry box glove Patent

[AIRAS-XLE-02531] c 05 N71-20380

Superconductive magnetic-field-trapping device

[AIRAS-XMP-03133] c 28 N78-28710

AIRCRAFT CONFIGURATIONS

Multiple pure tone elimination strut assembly — air

[AIRAS-XLA-02525] c 31 N70-22926

Pollution control device Patent

[AIRAS-XMP-03235] c 27 N71-27095

AIRCRAFTHOWDERS

Analytical photoionization mass spectrometer with an argon gas filter between the light source and monochromator

[AIRAS-LAR-10181-0] c 06 N71-13461

Separation unit Patent

[AIRAS-XLA-01971] c 15 N71-15022

Monitoring atmospheric pollutants with a heterodyne radome for a radar system

[AIRAS-XPO-11919-1] c 35 N74-11284

Fluorescence detection for monitoring atmospheric pollutants

[AIRAS-XPO-12306-1] c 45 N75-27585

Stealth photoprocess system

[AIRAS-LAR-11675-1] c 37 N76-17565

 Indicator providing continuous indication of the presence of a specific pollutant in air

[AIRAS-XPO-13474-1] c 45 N76-21742

Method for detecting pollutants — through chemical reactions and heat treatment

[AIRAS-LAR-11405-0] c 45 N76-31714

Combustion engine — for air pollution control

[AIRAS-XPO-13057-1] c 37 N71-31497

Cool defusilation process

[AIRAS-XPO-13967-1] c 44 N77-31527

AIRCRAFT CONFIGURATIONS

System for indicating fuel-efficient aircraft altitude

[AIRAS-LAR-12016-1] c 37 N71-31497

AIRCRAFT CONTROL

Satellite aided vehicle avoidance system Patent

[AIRAS-ERC-10226-1] c 21 N71-24948

Position location system and method

[AIRAS-ERC-100113] c 07 N72-12060

Video processor for air traffic control beacon system

[AIRAS-KSC-11155-1] c 33 N84-15395

AIRCRAFT EQUIPMENT

Inflatable radar reflector unit Patent

[AIRAS-XMS-00895] c 07 N70-40663

AIRCRAFT/GPPERSONAL COMPUTER

Rigide add and ripple subtract binary counters Patent

[AIRAS-XAS-04766] c 30 N73-18844

Thermocentral antenna array for microwave power conversion

[AIRAS-KSC-13886-1] c 32 N78-24351

AIRCRAFT/SPACECRAFT

System for indicating direction of intruder aircraft

[AIRAS-ERC-10226-1] c 14 N73-16483

Thin film interferometric array for microwave power conversion

[AIRAS-KSC-11155-1] c 33 N84-15395

AIRCRAFT/GPPERSONAL COMPUTER

Rigide add and ripple subtract binary counters Patent

[AIRAS-XAS-04766] c 30 N73-18844

Thermocentral antenna array for microwave power conversion

[AIRAS-KSC-13886-1] c 32 N78-24351

AIRCRAFT/AIRCRAFT SYSTEM

Variable wing span configuration Patent

[AIRAS-XLA-000292] c 04 N70-32555

Television simulation for aircraft and space flight Patent

[AIRAS-XSF-01037] c 09 N71-19449

Dual-lane aircraft having yawing wing and horizontal stabilizer

[AIRAS-XPO-11047-1] c 02 N72-26005

Family of airfoil shapes for rotating blades — for increased power efficiency and blade stability

[AIRAS-LAR-10347-1] c 02 N72-26005

AIRCRAFT CONFIGURATIONS

Variable wing span configuration Patent

[AIRAS-XLA-000292] c 02 N70-32555

Television simulation for aircraft and space flight Patent

[AIRAS-XSF-01037] c 09 N71-19449

Dual-lane aircraft having yawing wing and horizontal stabilizer

[AIRAS-XPO-11047-1] c 02 N72-26005

Family of airfoil shapes for rotating blades — for increased power efficiency and blade stability

[AIRAS-LAR-10347-1] c 02 N72-26005

AIRCRAFT CONSTRUCTION MATERIALS

Fuselage structure using advanced technology fiber reinforced composites

[AIRAS-LAR-11658-1] c 24 N82-26384

Curved cap corrugated sheet

[AIRAS-LAR-13425-1] c 18 N84-33450

AIRCRAFT CONTROL

Control for flexible parawing Patent

[AIRAS-XLE-00656] c 02 N71-11038

Attitude control for VTOL aircraft Patent

[AIRAS-XAC-00872] c 02 N71-20570

Control device Patent

[AIRAS-XAC-10016] c 15 N71-23809

Direct lift control system Patent

[AIRAS-XAC-10016] c 15 N71-23809

High-speed flight vehicle control Patent

[AIRAS-XLA-00867] c 02 N71-27095

Mechanically limited, electronically operated hydraulic valve system for aircraft controls Patent

[AIRAS-XAC-00048] c 02 N71-27095

Flight control system

[AIRAS-XMC-13931-1] c 21 N72-25955

Aircraft control system

[AIRAS-ERC-10438] c 02 N73-19004

Display system

[AIRAS-XLE-01305] c 14 N73-20474

Suppression of buffet

[AIRAS-LAR-10682-1] c 02 N73-26004

Integrated lift/drag controller for aircraft

[AIRAS-XAC-10458-1] c 05 N75-12900

High lift aircraft — with improved stability, control, performance, and noise characteristics

[AIRAS-XAC-11251-1] c 05 N75-25914

Filtering technique based on high-frequency plant modeling for high-gain control

[AIRAS-XAC-12015-1] c 08 N78-23067

Velocity vector control system augmented with direct lift control

[AIRAS-LAR-12206-1] c 08 N81-24106

Pitch attitude stabilization system utilizing engine pressure ratio feedback signals

[AIRAS-LAR-12206-1] c 08 N81-24106

AIRCRAFT DESIGN

Supersonic aircraft Patent

[AIRAS-XLE-04451] c 02 N71-22413

Dual-lane aircraft having yawing wing and horizontal stabilizer

[AIRAS-XPO-11047-1] c 02 N72-26005
**ALKALI HALIDES**

- Fire resistant materials
  - **[NASA-CASE-ARC-11252-1]** c 25 N83-36118

**ALKALI METALS**

- Alkaline earth metals
  - **[NASA-CASE-ARC-11252-1]** c 25 N83-36118
- Process for preparing higher oxides of the alkaline earth metals
  - **[NASA-CASE-ARC-10992-1]** c 26 N78-32299
- Alkaline metal salt binders and methods of manufacture
  - **[NASA-CASE-GSC-12030-1]** c 24 N79-31347

**ALKALINE BATTERIES**

- Precursors thereof
  - **[NASA-CASE-XMF-05688]** c 26 N75-27125
- Braze alloy binder
  - **[NASA-CASE-XMF-05688]** c 15 N73-32358

**ALPHA PARTICLES**

- Method and means for helium/hydrogen/methane measurement by alpha scattering
  - **[NASA-CASE-NPO-14076]** c 25 N80-20334

**AMMONIUM PERCHLORATES**

- Aluminized coatings
  - **[NASA-CASE-ARC-11261-1]** c 33 N75-19517

**AMMONIUM NITRATES**

- Nitric acid
  - **[NASA-CASE-ARC-11261-1]** c 33 N75-19517

**AMMONIUM NITRATES**

- Nitric acid
  - **[NASA-CASE-ARC-11261-1]** c 33 N75-19517
**BAFFLES**

- Automated single-slide steering device
  - [NASA-CASE-LAR-11944-1] c 51 N77-27677

**BABLES**

- Light radiation direction indicator with a baffle of two parallel grids
  - [NASA-CASE-XNP-00930] c 14 N59-24031
- Flexible ring splash damping baffle Patent
  - [NASA-CASE-LAR-1317-1] c 32 N71-11013
- Baffled anti-antipathy device Patent
  - [NASA-CASE-XLA-04605] c 32 N71-11016
- Floating baffles to improve efficiency of liquid transfer from pressurized vessels Patent
  - [NASA-CASE-KSC-10839] c 15 N75-26472

**BAMS**

- System for the measurement of ultra-low stray light levels — determining the adequacy of large space telescope systems
  - [NASA-CASE-MFS-25151-1] c 74 N79-11885
- Pressure leaded method and device for coal conversion systems
  - [NASA-CASE-XLA-05510-1] c 44 N84-14583
- Optical system with reflective baffles
  - [NASA-CASE-ARC-11952] c 74 N84-26400

**BANG**

- Relief container
  - [NASA-CASE-XNS-07076] c 05 N59-21922
- Gas diffusion liquid storage bag and method of use for storing blood
  - [NASA-CASE-NPO-10390-1] c 52 N79-14749

**BAKING**

- Beatable McLeod gauge
  - [NASA-CASE-XGS-01953-1] c 35 N79-33450
- A method and technique for installing light-weight fragile, high-temperature fiber insulation
  - [NASA-CASE-ESC-19804-3] c 24 N82-26387

**BALANCE**

- Thermoprotective device for devices Patent
  - [NASA-CASE-XAC-00648] c 14 N70-40000
- Device for monitoring a change in mass in varying gravitational environments
  - [NASA-CASE-MFS-21556-1] c 35 N74-26945

**BALANCING**

- Automatic balancing device Patent
  - [NASA-CASE-LAR-10774] c 10 N71-13545
- Lift balancing device
  - [NASA-CASE-XNP-00908] c 17 N71-27432

**BALL BEARING**

- Two component bearing Patent
  - [NASA-CASE-XLA-00113] c 15 N71-29198
- High speed rolling element bearing
  - [NASA-CASE-LEW-10066-1] c 15 N72-22490
- Large bearing elements Patent
  - [NASA-CASE-XLE-10187-1] c 15 N73-30458

**BALL BEARING (MASS)**

- Lift balancing device
  - [NASA-CASE-MFS-21548-1] c 11 N73-12264

**BALL BEARINGS (IMPELLANCE)**

- Apparatus for ballasting high frequency transmitters
  - [NASA-CASE-XGS-00053] c 09 N69-24318
- Direct current ballast circuit for metal halide lamp
  - [NASA-CASE-MFS-18407-1] c 33 N84-26427

**BALLISTICS**

- Filter modified polyurethane foam for ballistic protection
  - [NASA-CASE-XLA-00113] c 02 N73-26006

**BALLOON SOUNDING**

- Apparatus for controlling the temperature of balloon-borne equipment
  - [NASA-CASE-GSC-11028-1] c 34 N74-23009

**BALLOONS**

- Hot air balloon deceleration and recovery system Patent
  - [NASA-CASE-XLA-00624-2] c 02 N71-11007
- Inflation system for balloon type satellites Patent
  - [NASA-CASE-XGS-00251] c 31 N71-18081
- System for stabilizing torque between a balloon and gondola
  - [NASA-CASE-GSC-11077-1] c 02 N73-13008

**BALLS**

- Two-axis controller Patent
  - [NASA-CASE-XFR-00414] c 03 N70-42073
- Quartz ball valve
  - [NASA-CASE-NPO-14473] c 37 N80-23654
## SUBJECT INDEX

### CHOLESTEROL
- Reduction of blood serum cholesterol Patent [NASA-CASE-NPO-21119-1] c 52 N75-15270

### CHROMATOGRAPHY

### CHROMIUM

### CHROMIUM ALLOYS

### CIRCUIT BOARDS
- Printed circuit board with weights for attachment Patent [NASA-CASE-MFS-20408] c 18 N73-26904

### CIRCUIT PROJECTIONS
- Circuit breaker utilizing magnetic latching relay Patent [NASA-CASE-XMS-00273] c 33 N72-21930

### CIRCUIT PROTECTION
- Protection for overcurrent expansion systems Patent [NASA-CASE-XNP-04068] c 09 N75-21458
- Saturable core transformer protection apparatus for saturable core transformers Patent [NASA-CASE-XNP-07497] c 09 N72-22196
- Shielding elements for electrical components Patent [NASA-CASE-NPO-13525-1] c 37 N75-18573

### CIRCUIT BREAKERS
- Diode load protection fuse unit Patent [NASA-CASE-XNP-02251] c 12 N71-20866
- Circuit breaker utilizing magnetic latching relay Patent [NASA-CASE-MSC-11271] c 09 N71-29008

### CIRCUIT DIAGRAMS
- Radial pressure sensor Patent [NASA-CASE-XNP-02095] c 09 N71-24763
- Solid state switch Patent [NASA-CASE-XNP-09228] c 09 N75-27500
- Ultra-long monostranded multiconductor bimetallic semiconductor switch to allow charging of timing circuit Patent [NASA-CASE-XGS-00081] c 09 N70-34819
- Correlation function apparatus Patent [NASA-CASE-XNP-03748] c 07 N71-17155
- Diode and protection fuse unit Patent [NASA-CASE-XNP-04318] c 10 N72-26796
- Symmetrical odd-mode bandwidth multiplier Patent [NASA-CASE-NPO-12946-1] c 33 N75-31330
- Shunt-triode transmission line amplifier Patent [NASA-CASE-ARC-10971-1] c 33 N76-21930

### CIRCULATION CONTROL AIRFOILS
- Circuit breaker utilizing magnetic latching relay Patent [NASA-CASE-LAR-13226-1] c 27 N84-20700
- Solar cell and circuit array and process for nullifying magnetic fields Patent [NASA-CASE-XGS-03099] c 03 N70-23187

### CLAMPING CIRCUITS
- Pulse generating circuit employing switch means on ends of delay line for alternately charging and discharging same Patent [NASA-CASE-XNP-06074] c 10 N71-20960
- Thermal to electrical power conversion system with solid-state switches with sneak current compensation Patent [NASA-CASE-XNP-11386] c 03 N72-23048
- Controllable load insensitive power converters Patent [NASA-CASE-XRF-01284] c 09 N72-25252
- Failsafe multiple transformer circuit configuration Patent [NASA-CASE-XNP-10176] c 09 N72-25262

### CLAMPING CIRCUITS
- Control system for an induction motor with energy recovery Patent [NASA-CASE-MFS-25477-1] c 33 N76-16332
- Programmable scan/read circuitry for charge coupled device imaging detectors — spacecraft attitude control and star trackers Patent [NASA-CASE-XNP-03654-1] c 74 N84-23247
- A new solar cell design for improved open circuit voltage and high efficiency Patent [NASA-CASE-XNP-15629-1] c 44 N84-32901
- Circularly polarized antenna Patent [NASA-CASE-XNP-01281] c 09 N72-31235

### CIRCULAR TUBES
- Helicopter anti-torque system using strakes Patent [NASA-CASE-LAR-12333-1] c 05 N93-34400

### CIRCULAR TUBULAR (PHASE SHIFT CIRCUITS)
- Circuit having quantum post and parametric amplifier circuits utilizing the same Patent [NASA-CASE-XNP-02104] c 09 N71-23007

### CLAMPING CIRCUITS
DIAPHRAGMS (MECHANICS)

DIAMONDS

DIASTROPHIC

DIATOMICS

DIELECTRICS

DIGITAL

SUBJECT INDEX
VOCABULARY

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.

[DISCHARGE] Discharge: The flow of electric charge through a conductor, usually from a negatively charged source to a positively charged source.
ELECTRIC TERMINALS

ELECTRICAL INSULATION

Soldering connection Patent

[NASA-CASE-XNP-01951] c 09 N70-41929

[NASA-CASE-ARC-11117-1] c 52 N81-14612


[US-PATENT-APPL-SN-406799] c 57 N83-12952


[US-PATENT-APPL-SN-406796] c 54 N83-12943


[US-PATENT-APPL-SN-406771] c 29 N83-12868


[US-PATENT-APPL-SN-406760] c 18 N83-12835


[US-PATENT-APPL-SN-406749] c 7 N83-12802


[US-PATENT-APPL-SN-406747] c 5 N83-12796


[US-PATENT-APPL-SN-406742] c 0 N83-12781
ELECTROCHEMICAL CELLS

- Catalyst surfaces for the chromous/chromic redox couple
- Potential analysis for sputtering of target material
- Electrolysis of liquid metal
- Method of producing crystalline materials
- Electrical conductivity cell and method for fabricating same
- Electrochemical detection device — for use in specific applications
- Multistage depressed collector for dual mode operation
- Frangible electrochemical cell
- Electroscope
- Electrochemical Machining
- Method of electrolytically binding a layer of metal
- Electrochemical noise
- Electrochemical Machining
- Method of producing crystalline materials
- Electrical conductivity cell and method for fabricating same
- Electrochemical detection device — for use in specific applications
- Multistage depressed collector for dual mode operation
- Frangible electrochemical cell
- Electroscope
- Electrochemical Machining
- Method of electrolytically binding a layer of metal
- Electrochemical noise
- Electrochemical Machining
- Method of producing crystalline materials
- Electrical conductivity cell and method for fabricating same
- Electrochemical detection device — for use in specific applications
- Multistage depressed collector for dual mode operation
- Frangible electrochemical cell
- Electroscope
- Electrochemical Machining
- Method of electrolytically binding a layer of metal
- Electrochemical noise
- Electrochemical Machining
- Method of producing crystalline materials
- Electrical conductivity cell and method for fabricating same
- Electrochemical detection device — for use in specific applications
- Multistage depressed collector for dual mode operation
- Frangible electrochemical cell
- Electroscope
- Electrochemical Machining
- Method of electrolytically binding a layer of metal
- Electrochemical noise
- Electrochemical Machining
- Method of producing crystalline materials
- Electrical conductivity cell and method for fabricating same
- Electrochemical detection device — for use in specific applications
- Multistage depressed collector for dual mode operation
- Frangible electrochemical cell
- Electroscope
Grinding machines

- Grinding (material removal)
- Grinding equipment
- Grinding equipment and tools
- Grinding wheels

- Grinding (material removal) techniques
- Grinding (material removal) processes
- Grinding (material removal) equipment

- Grinding (material removal) materials
- Grinding (material removal) applications
- Grinding (material removal) systems

- Grinding (material removal) technology
- Grinding (material removal) innovations
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements

- Grinding (material removal) advancements
- Grinding (material removal) advancements
- Grinding (material removal) advancements
HEAT TRANSMISSION

- [NASA-CASE-LEW-12950-2] c 44 N83-29084
- Heat pipe thermal switch
- [NASA-CASE-LEW-13819-1] c 34 N83-35007
- Tip cap for a rotor blade
- [NASA-CASE-LEW-12364-1] c 34 N84-22560
- Method for sensing transient thermal pulse of material using a transient thermal paste
- [NASA-CASE-NPO-15749-2] c 35 N84-22935
- Heat pipes to reduce engine exhaust emissions
- [NASA-CASE-LEW-12091-1] c 37 N84-22958
- High thermal power density heat transfer apparatus

HEATERS

- [NASA-CASE-LEW-11227-1] c 73 N75-30876
- Protected isotope heat source — for atmospheric reentry
- [NASA-CASE-LAR-13118-1] c 27 N75-30876
- Heat transport high intensity high efficiency solar cell
- [NASA-CASE-LEW-12892-1] c 44 N83-14692
- Bakeable McLeod gauge
- [NASA-CASE-NPO-15494-2] c 35 N84-22935
- Batteries
- [NASA-CASE-XNP-01311] c 26 N75-29236
- Ethynyl-terminated ester oligomers and polymers
- [NASA-CASE-LEW-10805-3] c 26 N74-10521
- Acoustic grating impoundment meter
- [NASA-CASE-LEW-13826-2] c 24 N84-24711
- Helium to reduce engine exhaust emissions

HEATING EQUIPMENT

- [NASA-CASE-ARC-10403-1] c 05 N71-11190
- Helium assembly and latch means for thermostir temperature control
- [NASA-CASE-ARC-12118-1] c 27 N84-28988
- Hermetically sealed electronic equipment
- [NASA-CASE-LAR-11227-1] c 73 N75-30876
- Heat transport high intensity high efficiency solar cell

HEATERS

- [NASA-CASE-XNP-00733] c 06 N70-34948
- High pressure helium purifier Patent
- [NASA-CASE-XNP-00733] c 06 N70-34948
- Thermal compensator for closed-cycle helium refrigeration
- [NASA-CASE-LEW-10309-1] c 17 N71-16287
- Helium storage equipment
- [NASA-CASE-LEW-10309-1] c 17 N71-16287
- High thermal power density heat transfer apparatus

HELIOSTATS

- [NASA-CASE-XNP-00733] c 06 N70-34948
- Helium storage equipment
- [NASA-CASE-LEW-10309-1] c 17 N71-16287
- High thermal power density heat transfer apparatus

HIGH ALTITUDE BALLOONS

- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-LEW-11227-1] c 73 N75-30876
- Heat transport high intensity high efficiency solar cell
- [NASA-CASE-LEW-11227-1] c 73 N75-30876
- Heat transport high intensity high efficiency solar cell

HIGH ALTITUDE ENVIROMENTS

- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-LEW-11227-1] c 73 N75-30876
- Heat transport high intensity high efficiency solar cell
- [NASA-CASE-LEW-11227-1] c 73 N75-30876
- Heat transport high intensity high efficiency solar cell

HIGH ACCELERATION

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment

HIGH ALPHATITUDE ENVIRONMENTS

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment

HIGH ALTITUDE

- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist

HIGH ALTITUDE

- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist

HIGH ALTITUDE

- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist
- [NASA-CASE-ARC-11059-1] c 54 N78-32721
- Helium for controlling aerodynamically induced twist

HIGH ALTITUDE BALLOONS

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment

HIGH ALTITUDE BALLOONS

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment

HIGH ALTITUDE BALLOONS

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment

HIGH ALTITUDE BALLOONS

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment

HIGH ALTITUDE BALLOONS

- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
- [NASA-CASE-ARC-11174-1] c 24 N81-13999
- Helium storage equipment
LEG (ANATOMY)

Leak detector wherein a probe is monitored with ultraviolet radiation Patent

[c 15 N71-24866]

Method for detecting leaks in hermetically sealed containers Patent

[c 15 N71-25743]

Method and apparatus for detecting gross leaks Patent

[c 15 N71-24910]

Optical leak detector Patent

[c 14 N71-28992]

LEVEL (HORIZONTAL)

Low heat leak connector for cryogenic system Patent

[c 31 N71-21225]

Carbon granule probe microphone for leak detection Patent

[c 30 N71-21256]

Portable laser remote system for methane gas detection Patent

[c 29 N71-21040]

LEG (ANATOMY)

Actuator device for artificial leg Patent

[c 52 N71-14735]

Joint rotational assembly for the prosthetic leg Patent

[c 54 N71-20749]

Internal energy storage device for hip disarticulation Patent

[c 31 N71-22427]

LENS DESIGN

Chromatically corrected virtual image display — lens design Patent

[c 23 N71-12551]

LENSES

High temperature lens construction Patent

[c 25 N71-12762]

Optical characterization adapter for camera Patent

[c 44 N71-21964]

Petzval type objective including field shaping lens Patent

[c 23 N71-20070]

METHOD AND APPARATUS FOR IMAGING COHERENT LIGHT

Method and apparatus for eliminating coherent noise Patent

[c 31 N71-19285]

High temperature lens construction Patent

[c 23 N71-12600]

Catalyst canister for carbon dioxide reduction unit Patent

[c 25 N71-12813]

Cooling system for removing metabolic heat from an hermetically sealed spacesuit Patent

[c 15 N71-32201]

Air removal device Patent

[c 15 N71-23492]

LIFT DEVICES

Pumped vortex Patent

[c 83-19715]

LIFTING REENTRY VEHICLES

Device for handling heavy loads Patent

[c 11 N89-27466]

Recoverable rocket vehicle Patent

[c 31 N70-34176]

Direct lift control system Patent

[c 31 N70-29210]

Spherical tank gauge Patent

[c 13 N71-23257]

Device for controlling rocket engine Patent

[c 20 N76-22260]

Vortex-rotor control device Patent

[c 08 N79-14108]

LIFT DRAG RATIO

Flying wing tension vehicle Patent

[c 31 N71-24315]

Annular wing Patent

[c 08 N82-26277]

Skewed variable camber flap Patent

[c 08 N84-22551]

LIFTING ROBOTS

Recoverable rocket vehicle Patent

[c 31 N70-34176]

Lifting boat Patent

[c 11 N71-21217]

Lift balancing device Patent

[c 02 N76-18087]

LIFTING REENTRY VEHICLES

Space ship CORPORATION vehicle Patent

[c 31 N70-37924]

Variable geometry milled orbital vehicle Patent

[c 31 N71-15674]

Flight craft Patent

[c 02 N76-18087]

LIFT BEAMS

Spherical tank Patent

[c 24 N75-22500]

Carboranylmethylene-substituted phosphazenes and polymers Patent

[c 35 N72-23511]

LIGHT (VISIBLE RADIATION)

Anti-glare improvement for optical imaging systems Patent

[c 14 N71-15604]

Maximot spectrography Patent

[c 14 N71-29041]

Combustion detector Patent

[c 13 N71-18484]

Optical fiber tactile sensor Patent

[c 15 N71-19357]

LIGHT AIRCRAFT

Direct lift control system Patent

[c 14 N71-26109]

LIGHT BEAMS

Spectroscopic equipment using a slender cylindrical reflector as a substitute for a slit Patent

[c 23 N71-25206]

Optical communications system Patent

[c 17 N71-29681]

Multiple hologram recording and readout system Patent

[c 16 N71-29363]

LIGHT EMITTING DIODES

Photodetector detection system Patent

[c 83-29542]

Heads up display Patent

[c 08 N84-27732]

LIGHT GUN SYSTEMS

Hypervelocity gun Patent

[c 11 N71-18578]

LIGHT MODULATION

Retrodirective modulator Patent

[c 14 N71-15605]

Lamp modulator Patent

[c 09 N71-25250]

Laser modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]

Laser intensity modulator Patent

[c 14 N71-15605]
MAGNETIC SWITCHING
Magnetic power switch Patent
[NASA-CASE-KNP-05397-1] C 09 N71-24803
Current steering switch Patent
[NASA-CASE-XNP-05977-1] C 09 N71-29600
MAGNETIC TAPE RECORDERS
Radel safety brake
[NASA-GASC-11990-1] C 37 N77-14479
MAGNETIC TAPES
Endless tape cartridge Patent
[NASA-CASE-KSP-09275] C 14 N70-61476
Endless tape transport mechanism Patent
[NASA-CASE-KNP-12213] C 09 N71-10609
Low friction magnetic recording tape Patent
[NASA-CASE-KSP-09275] C 14 N70-15978
System for recording and reproducing pulse code modulated data Patent
[NASA-CASE-KNP-01812] C 08 N71-21042
Friction measuring apparatus Patent
[NASA-CASE-XNP-08580] C 14 N71-22995
Device for recovery of voice data from heat damaged magnetic tape
[NASA-CASE-MSC-14219-1] C 32 N74-27812
Disk and spacing checking network Patent
[NASA-CASE-GSP-11215-1] C 35 N78-32397
MAGNETIZATION
Magnetic taping method and apparatus
Magnetization device Patent
[NASA-CASE-GSP-11587] C 35 N78-32397
MAGNETOHYDRODYNAMIC FLOW
Magnetohydrodynamic arc thruster
Magnetohydrodynamic generators
Magnetohydrodynamic induction motor
Magnetohydrodynamic pump — for cryogenic fluids
[NASA-CASE-XNP-13683] C 09 N69-39983
Two-fluid magnetohydrodynamic system and method for thermal-electric power conversion Patent
[NASA-CASE-KSP-00564] C 03 N70-36803
Cross-field MHD plasma generator / accelerator Patent
Solar driven liquid metal MHD power generator Patent
[NASA-CASE-KSP-12455-1] C 44 N83-25813
MAGNETOMETERS
Nonmagnetic thermal motor for a magnetochore
[NASA-CASE-XNP-00180] C 09 N69-21513
Cryogenic apparatus for measuring the intensity of magnetic fields
MAGNETRONs
Magnetron emitting device
[NASA-CASE-XNP-17012-1] C 09 N71-24803
MAGNETRONs
Magnetic field and voltage monitor
[NASA-CASE-KSP-17012-1] C 09 N71-24803
MAGNETRONs
Magnetic field and voltage monitor
[NASA-CASE-KSP-17012-1] C 09 N71-24803
MAGNETRONs
Magnetic field and voltage monitor
[NASA-CASE-KSP-17012-1] C 09 N71-24803
MICROCHANNELS

Electrochemical detection device — for use in microbiology
Inertial micromotor detection
[NASA-CASE-XLA-12502-1] c 51 N81-28698

MICROCHANNELS

Vacuum and gamma-ray spectrometer
[NASA-CASE-GSC-12587-1] c 35 N82-32659
Micrometeoroid detector
[NASA-CASE-LEW-12396-1] c 18 N83-20996

MICROELECTRONICS

Microwave module package Patent
[NASA-CASE-EUC-10138] c 26 N71-14354
Microcircuit negative cutter
[NASA-CASE--lnX-00943] c 15 N72-27485

MICRONETWORKS

Method of fabricating improved solar cells
[NASA-CASE-NPO-13831-1] c 44 N81-14389
Method of making a high voltage G-rovogue solar cell
[NASA-CASE-NPO-13831-1] c 44 N82-29703
Method for sequentially processing a multi-level interconnected circuit in a vacuum chamber
[NASA-CASE-MFS-256704-1] c 33 N84-22884
Method for sequentially processing a multi-level interconnected circuit in a vacuum chamber
[NASA-CASE-MFS-13970-1] c 33 N78-23634
Method for determining bond quality of power transistors
[NASA-CASE-LEW-11073-1] c 35 N83-27975

MICROFILTERS

Selectively porous microsensor — microsensor size determination
[NASA-CASE-LAR-12352-1] c 35 N82-11431
Microwave filter
[NASA-CASE-XLA-09042-1] c 14 N71-26788

MICROCONTRIBUTIONS

Apparatus for handling micronic size particulate material
[NASA-CASE-NPO-10151] c 37 N78-17386

MICROMETROLOGY

Method of determining the characteristics and flux distribution of micrometeorites
[NASA-CASE-LEW-11073-1] c 35 N83-27975
Carbon granule probe microphone for leak detection
[NASA-CASE-NPO-12027-1] c 33 N83-29595

MICROPROCESSORS

Microminiaturized computerized medical diagnostic equipment
[NASA-CASE-LAR-11035-1] c 35 N76-24811
Auto-matic multi-banking of memory for microprocessors
[NASA-CASE-NPO-12595-1] c 60 N82-11785

MICROSCOPES

Microscope lock for microscopes
[NASA-CASE-LAR-10184] c 24 N72-22445
Hand-held photomicroscope
[NASA-CASE-XGS-123361] c 14 N73-33361

MICROSTRIPO Transmission Line

Thin conformal antenna array for microwave power conversions
[NASA-CASE-LEW-13035-1] c 35 N82-36004
Cavity-backed, micro-step dipole antenna Patent
[NASA-CASE-LEW-13035-1] c 35 N82-11236

MICROSTRUCTURE

Method of producing refractory composites containing refractory carbides, hard particles, and metal matrix
[NASA-CASE-NPO-13888-1] c 32 N78-24531
Multiple batch crucially polished microstrip antenna
[NASA-CASE-MS-13834-1] c 32 N80-36264
Cavity-backed, micro-step dipole antenna Patent
[NASA-CASE-LEW-13035-1] c 35 N82-11236

MICROWAVE BANDPASS RESONATORS

Preparation of tantalum carbide, hard particles, and metal matrix
Patent
[NASA-CASE-XLE-05940-1] c 18 N71-26153
Refactory metal base alloy composites
[NASA-CASE-MS-13834-1] c 32 N78-24531
Multiple batch crucially polished microstrip antenna
[NASA-CASE-XLE-05940-1] c 18 N71-26153

MICROWAVE FIELD EFFECT TRANSISTORS

Microminiaturized computerized medical diagnostic equipment
[NASA-CASE-XGS-123361] c 14 N73-33361

MICROWAVE FREQUENCIES

Microphotonics
[NASA-CASE-XGS-02171] c 09 N69-24324

HIGH-INTERSTICE RESONATOR FOR MASER AMPLIFIER

System for indicating fuel-efficient aircraft altitude
[NASA-CASE-LAR-11014-1] c 14 N72-22445

INDIRECT MICROBIAL DETECTION

Method and means for providing an absolute power measurement capability Patent
[NASA-CASE-LEW-11073-1] c 37 N75-26372

INDIRECT MICROBIAL DETECTION

Low-noise single aperture multimode monopulse antenna feed system Patent
[NASA-CASE-XNP-01725] c 07 N71-22723
Indirect microbial detection
[NASA-CASE-LAR-11014-1] c 14 N72-22445

INDIRECT MICROBIAL DETECTION

Low-noise single aperture multimode monopulse antenna feed system Patent
[NASA-CASE-XNP-01725] c 07 N71-22723

PHASE LOCK DEMODULATORS
Phase demodulation system with two phase locked loops Patent
[NASA-CASE-XP-00777] c 10 N71-19469
Unipolar signal processing including a phase locked loop with auxiliary feedback loop [NASA-CASE-GSC-12018-1] c 33 N77-14234

PHASE MODULATION
Phase detector assembly Patent
[NASA-CASE-XP-N0701] c 09 N60-40272
Bipolar phase detector and corrector for split phase [NASA-CASE-MSC-17820-1] c 33 N74-14956
Low distortion automatic phase control circuit — voltage control oscillator [NASA-CASE-MFS-21671-1] c 33 N74-22685
Compensating phase detector — with time correlation integrator for frequency multiplex switching [NASA-CASE-GSC-11741-1] c 33 N75-26243
Integrated selection circuit for outer switching [NASA-CASE-GSC-11829-1] c 35 N75-27301
Frequency discriminators and phase detector circuit [NASA-CASE-NO-P01511-1] c 33 N77-13031
Phase substitution of spare converter for a failed one of parallel group of staggered converters [NASA-CASE-NPO-1981-1] c 33 N77-30655
Apparatus and method for stabilized phase detection for binarized control signals [NASA-CASE-MSC-15646-1] c 33 N79-11313
High stability buffered phase comparator [NASA-CASE-GSC-12665-1] c 33 N84-16454
Three phase power factor controller [NASA-CASE-MFS-25535-2] c 33 N84-22885
Controlled commutator for receiving and tracking phase modulated signals [NASA-CASE-MSC-18170-2] c 32 N84-39752
Phase detector for three-phase power factor controller [NASA-CASE-MFS-25584-1] c 33 N84-27975

PHASE ATTENUATION
System for stabilizing phase delay utilizing a coaxial cable under pressure [NASA-CASE-NO-P01339-1] c 10 N71-19468
Two carrier communication system with single transmitter [NASA-CASE-MSC-12540-1] c 32 N77-28429
Quadrature-channel data transmission system Patent
[NASA-CASE-XAC-06302] c 08 N71-19763
Adaptive tracking notch filter system Patent
[NASA-CASE-MFS-16530-1] c 10 N71-22986
Phase locked phase modulator including a voltage controlled oscillator Patent
[NASA-CASE-MSC-20869-1] c 10 N71-23454
Phase multiplying electronic scanning system Patent
[NASA-CASE-MSC-13201-1] c 10 N71-28149
Phase modulator Patent
[NASA-CASE-MSC-13209-1] c 07 N71-28429
Two carrier communication system with single transmitter [NASA-CASE-NPO-11548-1] c 32 N73-28118
Decision feedback loop for tracking a polyphase modulated carrier [NASA-CASE-NPO-13101-1] c 32 N74-20811
Modulator for tone and binary signals — phase modulation of tone and binary signals on carrier waves in communication systems [NASA-CASE-GSC-11743-1] c 32 N75-24981
Phase modulating with odd and even finite power series of a modulation signal [NASA-CASE-LAR-11607-1] c 32 N77-14292
Swipt group delay measurement [NASA-CASE-NPO-13599-1] c 32 N76-25319
Quadraphase demodulation [NASA-CASE-GSC-12137-1] c 32 N68-32308
Closed Loop solar array-ion thruster system with power control circuit [NASA-CASE-LEW-12706-1] c 20 N79-20179
Baseband signal combiner for large aperture antenna array [NASA-CASE-NPO-14641-1] c 32 N81-29308
Doppler radar having phase modulation of both transmitted and reflected signals [NASA-CASE-MSC-18057-1] c 32 N84-22880
Method and apparatus for receiving and tracking phase modulated signals [NASA-CASE-MSC-16170-2] c 32 N84-27975
Integrating IQ detector imaging systems [NASA-CASE-MSC-16507-1] c 74 N84-28590

PHASE SHIFT
Bipolar phase detector and corrector for split phase [NASA-CASE-GSC-10156-1] c 33 N77-32308
Electromagnetic polarization systems and methods Patent
[NASA-CASE-GSC-10011-1] c 09 N71-24598
Time domain phase measuring apparatus [NASA-CASE-GSC-12229-1] c 33 N79-10038

PHASE SHIFTER CIRCUITS
Generator circuitry for multichannel [NASA-CASE-XAC-10608-1] c 09 N79-12517
Phase shift circuit apparatus [NASA-CASE-AFC-10609-1] c 10 N72-16172
Continuously variable voltage controlled phase shifter [NASA-CASE-NPO-11218-1] c 09 N72-33204
Induction motor control system with voltage controlled oscillator circuit [NASA-CASE-MFS-21465-1] c 33 N70-13241

PHASE LOCKED SERVO SYSTEM — for synchronizing the rotation of slip ring assembly [NASA-CASE-MFS-22079-1] c 33 N75-13159
Low speed phase lock speed control system — for brushless dc motor [NASA-CASE-GSC-11127-1] c 09 N75-24798
Digital phase locked loop [NASA-CASE-GSC-11623-1] c 33 N75-25040
Telemetry synchronizer [NASA-CASE-GSC-11669-1] c 17 N76-22245
Linear phase demodulator including a phase locked loop with auxiliary feedback loop [NASA-CASE-GSC-12016-1] c 33 N77-14334
Frequency translating phase conjugation circuit for active retrodirective antenna array microwave transmission [NASA-CASE-NPO-14360-1] c 32 N81-14185
PN look indicator for dithered PN code tracking [NASA-CASE-NPO-14345-1] c 33 N81-33405
Deployable phase lock acquisition for suppressed carrier signals [NASA-CASE-NPO-14311-1] c 33 N82-29539

PHASE SHIFTING INTERFERENCE METERS
Antenna system for acquisition and tracking system Patent
[NASA-CASE-XMS-09610] c 07 N71-24625

PHASE TRANSFORMATIONS
Slag flux magnetohydrodynamic generator [NASA-CASE-XLE-02085] c 03 N69-39963

PHASE VELOCITY
Ultracoustic device — for producing changes in acoustic attenuation and phase velocity [NASA-CASE-LAR-11435-1] c 35 N76-15432

PHASED ARRAYS
Phase control circuits using frequency multiplications for phased array antennas [NASA-CASE-ERC-10368] c 10 N73-18206
Pulsed array antenna control [NASA-CASE-MSC-14939-1] c 32 N79-11264
Phase conjugation method and apparatus for an active retrodirective antenna array [NASA-CASE-NPO-12841-1] c 32 N79-24210
Control phased array antenna [NASA-CASE-MSC-16800-1] c 32 N81-14187
Beam and phased antenna array [NASA-CASE-MSC-18532-1] c 32 N82-27558
Electronic scanning spacecraft communication system Patent [NASA-CASE-MSC-18569-1] c 32 N83-19970

PHENOLIC EPoxy RESINS
Phenolic resins containing pendent ethyl groups and cured resins therefrom [NASA-CASE-XLR-12826-1] c 27 N84-24085

PHENOLIC RESINS
Bonding method in the manufacture of continuous reinforcement for sensor devices [NASA-CASE-LAR-10357-1] c 24 N75-30260

PHOSPHINE
Novel polymers and method of preparing same [NASA-CASE-NPO-10998-1] c 06 N73-32029

PHOSPHINES
The 1,1,1-triaryl-2,2,2-trifluoroethanes and process for their synthesis [NASA-CASE-ARC-11370-1] c 27 N84-22754

PHOSPHORUS
Phosphorus containing pendent ethyl group and cured resins therefrom [NASA-CASE-XLR-12826-1] c 27 N84-24085

PHOSPHITES
Phosphorus compounds as an acoustic damper [NASA-CASE-ARC-11370-1] c 27 N84-22754

PHOSPHITES
Phosphorus compounds as an acoustic damper [NASA-CASE-ARC-11370-1] c 27 N84-22754
ROCKET FIRING
Alluviation of divergence during rocket launch Patent
[NASA-CASE-XLA-00097] c 31 N71-15663

ROCKET FLIGHT
Technique for control of free-flight rocket vehicles Patent
[NASA-CASE-XLA-00256] c 31 N71-15663

ROCKET PROPELLANTS
Scanning aspect sensor employing an apertured disc and a commutator Patent
[NASA-CASE-XGS-02866] c 14 N69-27432

ROCKET VEHICLES
Hydrogen fire detection system with logic circuit to analyze the spectrum of temporal variations of the optical spectrum Patent
[NASA-CASE-MFS-13130] c 10 N72-17173

ROCKS
Rock drill for recovering samples Patent
[NASA-CASE-XNP-05747] c 14 N69-21923

ROCKET THRUSTING
Technique for control of free-flight rocket vehicles Patent
[NASA-CASE-XLA-00256] c 31 N71-15663

ROCKET NOZZLES
Gimballed partially submerged rocket nozzle Patent
[NASA-CASE-XKP-01074] c 14 N71-18465

ROCKET NOZZLE LININGS
Self-sealing, unbonded, rocket motor nozzle closure Patent
[NASA-CASE-NPO-14395-1] c 37 N82-21587

ROCKET TEST FACILITIES
High vacuum condenser tank for ion rocket tests Patent
[NASA-CASE-XLA-00016] c 11 N70-32378

ROCKET THRUST
Apparatus and method for controlling the exhaust of a rocket thrusting system Patent
[NASA-CASE-XNP-02012] c 28 N70-21213

ROCKET THRUSTING
Technique for control of free-flight rocket vehicles Patent
[NASA-CASE-XLA-00256] c 31 N71-15663

ROCKET WING AIRCRAFT
Control aircraft system Patent
[NASA-CASE-ERC-10429] c 02 N73-19004

ROCKET WINGS
Variable geometry rotor system Patent
[NASA-CASE-XMF-01598] c 21 N71-15583

Laser apparatus for improving maneuverability from rotating objects Patent
[NASA-CASE-XGS-02041] c 14 N69-27485

Laser apparatus for improving maneuverability from rotating objects Patent
[NASA-CASE-MFS-11279] c 16 N71-20400

Movable load system — for synchronizing the rotation of a slip ring assembly Patent
[NASA-CASE-MFS-22037] c 32 N75-12319

Annular momentum control device used for stabilization of space vehicles and the like Patent
[NASA-CASE-LAR-10511] c 15 N76-14156

Axially and radially controllable magnetic bearing Patent
[NASA-CASE-GSC-11551-1] c 37 N66-16459

Multi-disc in-line docking capability for rotating space stations Patent
[NASA-CASE-MFS-20853-1] c 15 N77-10112

Rotatable mass for a flywheel Patent
[NASA-CASE-XNP-09755] c 48 N74-22069

Acoustic driving of a rotor Patent
[NASA-CASE-XNP-14006-1] c 79 N70-20807

Multicopter rotating optical interface for data transmission Patent
[NASA-CASE-XNP-14066-1] c 74 N70-30411

Patent
[NASA-CASE-LAR-11900-1] c 37 N76-17153

PATENT
Patent
[NASA-CASE-LAR-10557] c 02 N72-11018

PATENT
Patent
[NASA-CASE-FRC-10071-1] c 32 N74-20813

PATENT
Patent
[NASA-CASE-FRC-10065] c 09 N71-27364

PATENT
Patent
[NASA-CASE-ERC-10065] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-12544-1] c 07 N81-27096

PATENT
Patent
[NASA-CASE-ARC-10197-1] c 05 N76-10778

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-12544-1] c 07 N81-27096

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255

PATENT
Patent
[NASA-CASE-LAR-10620-1] c 09 N72-25255
Sealed battery gas manifold construction Patent
[NASA-CASE-XNP-00302] c 09 N83-19286
Self-lubricating radial face seal Patent
[NASA-CASE-LEW-12989-1] c 37 N82-19982
Oxidizing seal for a turbine lip gas path
[NASA-CASE-LEW-14053-1] c 07 N84-22565
SEALING TECHNOLOGY
Test fixture for pellet-like electrical elements
[NASA-CASE-LEW-12091-1] c 37 N81-24442
Oxidizing seal for a turbine lip gas path
[NASA-CASE-LEW-14053-1] c 07 N84-22565

SEALS (STOPPERS)

Sealant composition for concrete Patent
[NASA-CASE-MSC-18134-1] c 18 N84-32424

Self-lubricating fluoride metal composite materials Patent
[NASA-CASE-LEW-12989-1] c 37 N82-19982
Self-lubricating gear and other mechanical parts Patent
[NASA-CASE-MFS-14971] c 33 N80-33482
Method for making bearing material
[NASA-CASE-LEW-11903-3] c 24 N80-33482

FORCES

Sealant composition for concrete Patent
[NASA-CASE-MSC-18134-1] c 18 N84-32424
Self-lubricating gear and other mechanical parts Patent
[NASA-CASE-MFS-14971] c 33 N80-33482
Method for making bearing material
[NASA-CASE-LEW-11903-3] c 24 N80-33482

FLUID PRESSURE BALANCED SEAL

Copyright © 2023 No Stopping. All Rights Reserved.
SIGNAL RECEPTION

Digital interface for bi-directional communication between a computer and a peripheral device.

([NASA-CASE-GSC-11839-3] c 60 N77-32731
Digital to analog converter for two-dimensional radiant measurement system.

([NASA-CASE-MSC-12494-1] c 32 N74-20810
Optimum predetection diversity receiving system.

([NASA-CASE-MSC-11819-1] c 32 N84-34651
Bi-polar phase detector and corrector for split phase PCM data signals Patent.

([NASA-CASE-ARC-10466-1] c 50 N77-17213
Digital to analog conversion apparatus.

([NASA-CASE-GSC-12635-1] c 32 N80-25878
Computer and peripheral devices.

([NASA-CASE-MSC-12462-1] c 32 N84-22820
Digital interface for bi-directional communication between a computer and a peripheral device.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.

([NASA-CASE-ARC-10755-2] c 32 N74-21666
Television camera video level control system.

([NASA-CASE-GSC-10975-1] c 32 N75-24981
Signal to noise ratio determination circuit.
SOLAR ENERGY ABSORBERS

Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-22562-1] c 44 N76-14595

Non-tracking solar energy collector system
[NASA-CASE-NPO-13817-1] c 44 N79-11471

Solar cell collector method for producing same
[NASA-CASE-LEW-15252-1] c 44 N79-11472

Electromagnetic radiation energy arrangement — coatings for solar energy absorption and infrared reflection

Horizontally mounted solar collector

[NASA-CASE-MFS-23439-1] c 44 N79-24432

Solar energy collection system
[NASA-CASE-NPO-13597-1] c 44 N79-24433

Solar concentrator

[NASA-CASE-MFS-23727-1] c 44 N90-14473

Cylindrical collector and energy storage system
[NASA-CASE-LAR-12052-1] c 44 N90-20810

Solar energy receiver for a Stirling engine
[NASA-CASE-NPO-14619-1] c 44 N17158

Solar tracking system
[NASA-CASE-MFS-23999-1] c 44 N182432

Automotive air conditioning utilizing solar and motor waste heat
[NASA-CASE-NPO-15131-1] c 44 N252776

Method of forming oxide coatings — for solar collector panels
[NASA-CASE-LEW-13123-1] c 27 N83-29388

Protective telescopic shield for solar concentrator
[NASA-CASE-LEW-13223-1] c 44 N91-25164

Solar concentrator protective system

[NASA-CASE-LEW-15662-1] c 44 N96-28204

Stable density stratification solar pond
[NASA-CASE-NPO-15418-1] c 44 N96-32810

SOLAR ELECTRIC PROPULSION

Closed Loop solar cell-iron thruster system with power control circuitry
[NASA-CASE-LEW-12790-1] c 20 N79-20179

SOLAR ENERGY

Stacked solar cell arrays
[NASA-CASE-NPO-1771] c 43 N73-20040

Solar power system — using Fresnel
[NASA-CASE-NPO-17628-1] c 44 N75-35581

Thermally controlled non-tracking type solar energy concentrator
[NASA-CASE-MFS-23497-1] c 44 N78-14602

Solar photovoltaic power system —
[NASA-CASE-NPO-18375-1] c 44 N77-32580

Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-17326-1] c 44 N77-32853

Solar heating system
[NASA-CASE-LEW-12009-1] c 44 N78-15580

Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c 44 N79-25359

Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23501-1] c 44 N79-11469

Primary reflector for solar energy collection systems
[NASA-CASE-NPO-13597-1] c 44 N79-14529

Method of construction of a multi-cell solar array
[NASA-CASE-MFS-23504-1] c 44 N79-28475

Solar cell module

[NASA-CASE-NPO-14487-1] c 44 N79-32157

Solar energy modulator
[NASA-CASE-NPO-15386-1] c 44 N81-3572

Stable density stratification solar pond
[NASA-CASE-NPO-15418-1] c 44 N81-3572

SOLAR ENERGY ABSORBERS

Panel for selectively absorbing solar thermal energy and the method of producing said panel
[NASA-CASE-LEW-15033-1] c 44 N81-43782

SOLAR ENERGY

Solar cell

[NASA-CASE-LEW-13223-1] c 44 N91-17460

Selective coating for solar panels — using black chrome and black nickel
[NASA-CASE-LEW-12159-1] c 44 N91-19186

Aluminium or copper substrate panel for selective absorption of solar energy

[NASA-CASE-MFS-23513-1] c 44 N90-18452
SPACECRAFT DOCKING

Guidance and maneuver analyzer Patent
[NASA-CASE-XNP-00203-1] c 14 N71-15621
Climbing assembly for inertial components Patent
[NASA-CASE-XNS-02164-1] c 15 N71-20813
Optical projector system Patent
[NASA-CASE-XNP-02353-1] c 29 N71-21182
Combined optical attitude and altitude indicating instrument Patent
[NASA-CASE-XLA-01907-1] c 14 N71-23256
Method and apparatus for mapping planets
[NASA-CASE-NPO-11401-1] c 27 N72-21118
Spacecraft attitude control method and apparatus
[NASA-CASE-HQN-10439-1] c 21 N72-21624
Pump for driving fluid flows
[NASA-CASE-NPO-11147-1] c 35 N71-24513
Deployable pressurized cell structure for a spacecraft apparatus
[NASA-CASE-LAR-10295-1] c 35 N71-21062

Directed-switch Dickie radometers
[NASA-CASE-XNP-01411-1] c 35 N71-18039
Real-time multiple-look synthetic aperture radar processor for spacecraft applications
[NASA-CASE-NPO-14154-1] c 32 N72-12297
Optical system
[NASA-CASE-NPO-16581-1] c 74 N83-25541
Stirling cycle cryogenic cooler
Vibration isolation and pressure compensation apparatus for sensitive instrumentation
[NASA-CASE-LAR-12728-1] c 35 N75-30206

SMA-pressurized cell micrometeoroid detector Patent
[NASA-CASE-XNP-00387-1] c 32 N71-19253

Bi-directional control system for energy flow in a solar power system
[NASA-CASE-MFS-25576-1] c 44 N84-32913

SPACECRAFT PROPULSION

Controlled propulsion method and apparatus Patent
[NASA-CASE-XLE-00817-1] c 28 N70-33265
Reaction-propulsion propulsion system Patent
[NASA-CASE-XNP-01104-1] c 28 N70-39931
Iodine engine casing construction and method of making same Patent
[NASA-CASE-XNP-03962-1] c 26 N71-22903
Voice operated controller Patent
[NASA-CASE-XLA-00461-1] c 31 N71-33160
Solid propellant motor
[NASA-CASE-NPO-11402-1] c 20 N78-32179
General purpose rocket furnace
[NASA-CASE-MFS-25460-1] c 12 N78-26075
Sized control device for a heavy duty shaft — solar sails for spacecraft propulsion
[NASA-CASE-NPO-14170-1] c 37 N81-15384

SPACECRAFT ELETRONIC EQUIPMENT

Portable environmental control system Patent
[NASA-CASE-NPO-14521-1] c 37 N79-24421

Satellite retrieval system
[NASA-CASE-MFS-25404-1] c 34 N78-24093

SPACECRAFT ROCKETRY

Space capsule Patent
[NASA-CASE-XLA-01498-1] c 31 N70-39708
Event recorder Patent
[NASA-CASE-XLA-01382-1] c 14 N71-21006

SPACECRAFT BRIDLELINE unit

Aerodynamic protection for space flight vehicles Patent
[NASA-CASE-XNP-05201-1] c 31 N71-17676
Isothermal cover with thermal reservoirs Patent
[NASA-CASE-XNP-05410-1] c 33 N71-25533
Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XMF-07770-1] c 34 N84-11456
Thermal insulation protection means Patent
[NASA-CASE-MSC-12737-1] c 24 N79-25142
Thermal barrier pressure seal — shielding junctions between spacecraft control surfaces and structures
[NASA-CASE-MSC-18134-1] c 37 N81-15363
High temperature glass thermal control structure and coating — for application in spacecraft reusuable heat shielding
[NASA-CASE-ARC-11614-1] c 44 N83-34445
Variable anodic thermal control coating
[NASA-CASE-LAR-12719-1] c 34 N83-34449
Thermal barrier material
[NASA-CASE-LAR-12738-2] c 18 N84-15180
Shell tile thermal protection system
[NASA-CASE-XNP-02666-1] c 27 N84-27866

SPACECRAFT STABILITY

Reaction wheel scanner Patent
[NASA-CASE-XGS-02036-1] c 14 N71-21082

SPACECRAFT STRUCTURES

Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XGS-01350-1] c 30 N71-19253


SUBJECT INDEX
A-137
TELEOPERATORS

Teleoperator synchro

A teleoperator synchro is a device used for coordinating the movements of two or more devices in a system where the timing of their actions is crucial. It can be specialized for coordinating the operations of different systems, such as those used in robotic control or remote manipulation tasks. The specific applications and requirements for such a device would depend on the context in which it is used, such as in manufacturing, space exploration, or medical procedures.
ZIRCONIUM CARBIDES

Nicral ternary alloy having improved cyclic oxidation resistance
[NASA-CASE-LEW-13339-1] c 26 N82-31505

Improved nickel base coating alloy — oxidation resistant coatings
[NASA-CASE-LEW-13834-1] c 26 N83-24639

ZIRCONIUM CARBIDES
Zirconium carbide as an electrocatalyst for the chromous-chromic redox couple
[NASA-CASE-LEW-13246-1] c 44 N83-27344

ZIRCONIUM OXIDES
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c 37 N75-15992
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
Improved thermal barrier coating system
[NASA-CASE-LEW-14057-1] c 27 N84-33585
### Typical Inventor Index Listing

<table>
<thead>
<tr>
<th>INVENTOR</th>
<th>TITLE</th>
<th>NASA CASE NUMBER</th>
<th>SUBJECT CATEGORY NUMBER</th>
<th>NASA ACCESSION NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAMS, B. R.</td>
<td>Chopped molecular beam multiplexing system</td>
<td>[NASA-CASE-LAR-13174-1]</td>
<td>c 72</td>
<td>N84-25431</td>
</tr>
<tr>
<td>ADAMSON, A. P.</td>
<td>Impact absorbing blade mounts for variable pitch blades</td>
<td>[NASA-CASE-LEW-12319-1]</td>
<td>c 37</td>
<td>N78-10468</td>
</tr>
<tr>
<td>ACHARE, B. N.</td>
<td>Phthalocyanine polymers</td>
<td>[NASA-CASE-ARC-11492-3]</td>
<td>c 27</td>
<td>N74-14375</td>
</tr>
<tr>
<td>ACORD, J. D.</td>
<td>Photoreponsive device to detect bearing deviation</td>
<td>[NASA-CASE-XNP-00428]</td>
<td>c 21</td>
<td>N70-35089</td>
</tr>
<tr>
<td>ADAMS, B. R.</td>
<td>Chopped molecular beam multiplexing system</td>
<td>[NASA-CASE-LAR-13174-1]</td>
<td>c 72</td>
<td>N84-25431</td>
</tr>
<tr>
<td>ADAMSON, A. P.</td>
<td>Impact absorbing blade mounts for variable pitch blades</td>
<td>[NASA-CASE-LEW-12319-1]</td>
<td>c 37</td>
<td>N78-10468</td>
</tr>
<tr>
<td>ACHARE, B. N.</td>
<td>Phthalocyanine polymers</td>
<td>[NASA-CASE-ARC-11492-3]</td>
<td>c 27</td>
<td>N74-14375</td>
</tr>
<tr>
<td>ACORD, J. D.</td>
<td>Photoreponsive device to detect bearing deviation</td>
<td>[NASA-CASE-XNP-00428]</td>
<td>c 21</td>
<td>N70-35089</td>
</tr>
</tbody>
</table>

### Listings in this index are arranged alphabetically by inventor. The title of the document provides the user with a brief description of the subject matter. The NASA Case Number is the primary access point to patent documents. The subject category number indicates the category within the subject category. The titles are arranged under each inventor in ascending accession number order.
BRODER, J. D.

Radio frequency arraying method for receivers

Variability reduction measurement method and apparatus

BROWN, G. V.

BROWN, E. L.

BROWN, C. E.

BROUSSAHD, R.

BROUSSARO, P. H.

BROOKS, R. L.

BROOKS, G. W.

BROOKS, D. E.

BROOKS, A. D.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BRODIE, S. B.

BROKZ, S. S.

BRODERICK, R. F.

BRODERICK, J. C.

BRODER, J. D.

BROMAN, C.L.

BRODIE, S. B.

BROE, S. B.

BROOKS, G. W.

BROOKS, A. D.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.

BROWN, R. F.

BROOKS, D. E.

BROOKS, B. W.

BROOKS, J. T.

BROOKS, R. M.

BROOKS, R. L.

BROOKS, R. H.
**CREEL, T. R., JR.**

Apparatus for determining thermophysical properties of test specimens

[NASA-CASE-LAR-11853-1] c 09 N77-21731

**CREEPAU, P. C.**

Flexible, replaceable, portable material for electrical connectors Patent

[NASA-CASE-XGS-05160] c 18 N71-29581

**CRESS, S. B.**

Coaxial inverted geometry transistor having bulbed emitter

[NASA-CASE-ARC-10330-1] c 09 N73-32112

**CRESSEY, J. R.**

Determining properties of a material

[NASA-CASE-XGS-04897] c 08 N71-20571

**CREWS, J. H., JR.**

Double-walled support system Patent

[NASA-CASE-XLA-06530] c 32 N71-25360

**CRIFELLI, D. B.**

Parasitic probe antenna Patent

[NASA-CASE-XKS-09938-1] c 09 N71-13521

**CRIER, S. W.**

Antenna array phase quadrature tracking system

[NASA-CASE-XLA-06609-1] c 14 N69-27459

**CRIGGS, W. F.**

Personal propulsion unit Patent

[NASA-CASE-MFS-20-130] c 28 N71-27955

**CROCKETT, C.**

Heat sensor assembly

[NASA-CASE-XGS-06009-1] c 14 N69-27459

**CROOKST, A. P.**

Antenna array diagnostic system

[NASA-CASE-ARC-XLA-10-64] c 07 N71-30670

**CROWELL, T. E.**

Heat flux sensor assembly

[NASA-CASE-LAR-10545-1] c 09 N72-21244

**CROWE, D. E.**

Cathode-ray tube detector

[NASA-CASE-MFS-23275-1] c 43 N79-31706

**CROUCH, R. K.**

Vapor phase growth of groups 3-5 compounds by chemisorption Patent

[NASA-CASE-XGS-10041-1] c 07 N73-21717

**CROUCK, R. L.**

Filter for third order phase locked loops Patent

[NASA-CASE-MFS-23726-1] c 43 N79-26439

**CROombus, A. R.**

Method for making hollow elastomeric bodies Patent

[NASA-CASE-MF-21247-1] c 33 N75-13205

**CROOKES, J. H., JR.**

Method of fabricating an article with cavities Patent

[NASA-CASE-LAR-10381-1] c 31 N74-18089

**CROW, J. B.**

Cathode-ray tube detection and processing apparatus

[NASA-CASE-KSC-11251-1] c 35 N75-30504

**CROW, R. B.**

Mechanical simulator of low gravity conditions Patent

[NASA-CASE-XLA-07567-1] c 36 N75-29508

**CROW, R. F.**

Microwave power receiving antenna Patent

[NASA-CASE-MFS-20233] c 09 N71-13448

**CROW, R. B.**

Method of making hollow elastomeric bodies Patent

[NASA-CASE-NPO-13535-1] c 37 N76-21524

**CULLOCH, T. A.**

Microstrip antenna structures Patent

[NASA-CASE-XLS-01807] c 15 N71-10799

**CUMMINGS, J. W.**

Automatic thermal switch Patent

[NASA-CASE-GSC-12553-1] c 34 N83-23535

**CunNingsHAM, G. R.**

Hydrostatic bearing support

[NASA-CASE-LIR-11945-1] c 37 N77-28486

**CUMMINS, H. R.**

Variable frequency oscillator or magnetic pump Patent

[NASA-CASE-LIR-12171-1] c 39 N83-22084

**CUNNINGHAM, J. E.**

Parasitic probe antenna Patent

[NASA-CASE-XLA-07567-1] c 36 N75-29508

**CunNINGHAM, J. W.**

Torsional disconnect unit Patent

[NASA-CASE-XLM-01144-1] c 25 N75-26043

**CUNNINGHAM, J. M.**

Harness assembly Patent

[NASA-CASE-MFS-21289] c 14 N72-22442

**CUNNINGHAM, K. J.**

Detector of mass spectral lines Patent

[NASA-CASE-XLS-00909-1] c 10 N72-20223

**CUNNINGHAM, W. H.**

Spray solenoid brake

[NASA-CASE-MFC-20244] c 15 N72-21483

**CUNNINGHAM, W. H.**

Double-walled support system Patent

[NASA-CASE-LAR-12896-1] c 37 N76-21524

**CUNNINGHAM, W. M.**

Metallic heat exchanger and processing apparatus

[NASA-CASE-KSC-11251-1] c 35 N75-30504

**CUNNINGHAM, W. M.**

Method of making hollow elastomeric bodies Patent

[NASA-CASE-NPO-13535-1] c 37 N76-21524

**CUNNINGHAM, W. S.**

Mechanically actuated triggered hand Patent

[NASA-CASE-MFS-21289] c 14 N72-22442

**CUNNINGHAM, W. S.**

Harness assembly Patent

[NASA-CASE-MFS-12411-1] c 28 N71-14058

**CUNNINGHAM, W. W.**

Remote multiphase control Patent

[NASA-CASE-MFS-22022] c 70 N82-28417

**CUNNINGHAM, W. W.**

Torsional disconnect unit Patent

[NASA-CASE-MFS-22022] c 70 N82-28417

**CUNNINGHAM, W. W.**

Mechanical simulator of low gravity conditions Patent

[NASA-CASE-MFS-21846-1] c 33 N75-15028

**CUNNINGHAM, W. W.**

Wireless transmission and processing apparatus

[NASA-CASE-KSC-11251-1] c 35 N75-30504

**CUNNINGHAM, W. W.**

Microwave power receiving antenna Patent

[NASA-CASE-MFS-20233] c 09 N71-13448

**CUNNINGHAM, W. W.**

Mechanical simulator of low gravity conditions Patent

[NASA-CASE-MFS-21289] c 14 N72-22442
CARGO, D.
DASTOOR, H. N.
DAVID, R. M.
DAVID-MALIQ, M. A.
DAVIS, D. P.
DAVIS, D. C.
DAVIDSON, J. S. W.
DAVIDSON, J. K.
DAVIS, J. G., JR.
DAVIS, J. W.
DAVIS, W. T.
DAVIS, R. C.
DAVIS, N. S.
DAY, R. M.
DAYAN, V. H.
DEBOR, G. J.
DEBOO, Q. J.
DECARLO, F. S.
DEGROOT, M. D.
DEGROOT, R. W.
DELMAR, R. G.
DELMAR, R. L.
DELMAR, R. W.
DELMARRE, R. L.
DELMATIAR, L. A.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
DELEPAINE, R. W.
FINLEY, W. R.

FINLEY, W. R. Analog-to-digital converter
[NASA-CASE-MSC-15111-1] c 08 N72-22163
FINNERTY, A. A. Software forming method and apparatus
[NASA-CASE-NPO-15076-1] c 31 N83-35176
FINNIE, C. J. Instrumented imaging apparatus having transformer means connected across a pair of bolometers Patent
[NASA-CASE-XNP-01193] c 10 N71-16057
FISHER, D. D. Cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c 52 N83-22675
FISCHER, J. A. Electron beam exposure guide Patent
[NASA-CASE-XMF-02833] c 15 N71-15918
FISCHER, J. R. Intravenous therapy device
[NASA-CASE-XNP-01193] c 33 N81-29342
FISH, D. C. Fuel forming tubular elbows Patent
[NASA-CASE-XMF-01083] c 15 N71-22723
FISH, R. H. Method for modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c 27 N76-15510
FISHER, A. Process for making RF shielded cable connector assemblies and the product formed thereby
[NASA-CASE-GSC-11251-1] c 09 N73-28083
FITCH, E. C. Modular tiome for tone and binary signals
[NASA-CASE-GSC-11743-1] c 32 N75-24881
FITZ, E. R. Phase modulator Patent
[NASA-CASE-ARC-10021-1] c 07 N75-28412
FITTON, A. J., A. Multiple office throttle valve Patent
[NASA-CASE-XNP-09809] c 15 N71-18500
FITTON, A. J. Machine for use in monitoring fatigue life for a plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c 39 N78-10493
FITZGERALD, D. J. Flow test device
[NASA-CASE-MSC-13201-1] c 07 N74-26489
FITZGERALD, D. W. Multiport office throttle valve Patent
[NASA-CASE-XNP-09809] c 15 N71-18500
FITZGERALD, J. J. Visual examination apparatus
[NASA-CASE-ARC-10029-1] c 05 N75-26072
FITZGERALD, J. J. Heat exchanger apparatus
FITZGERALD, T. M. A mechanically acoustic variable time delay line Filter
[NASA-CASE-ERC-10032] c 10 N71-25900
FITZMAURICE, M. W. Actively shaped model survey system Patent
[NASA-CASE-LAR-10008-1] c 07 N76-26681

FLAHERTY, R. A. Software forming method and apparatus
[NASA-CASE-NPO-15076-1] c 31 N83-35176
FLAHERTY, R. Cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c 52 N83-22675
FLEISCHMAN, G. L. Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c 34 N77-32413
FLEMING, D. P. Dual entrance squeezer film damper
[NASA-CASE-LEW-00027] c 28 N70-33575
FLETCHER, E. A. Method of igniting solid propellants Patent
[NASA-CASE-XMF-01083] c 27 N75-22008
FLETCHER, I. L. Multiple surface synchronization system
[NASA-CASE-GSC-10930-1] c 07 N72-11149
FLOYD, E. L. High impact pressure regulator Patent
[NASA-CASE-ERC-10010] c 14 N71-18625
FOGAL, G. L. Automatic bioswae sampling
[NASA-CASE-MSC-14840-1] c 54 N76-14604
FOKHEM, G. M. Fluid mass sensor for a zero gravity environment
[NASA-CASE-MSC-14853-1] c 35 N75-19385
FORD, A. G. Rock cell for recovering samples
[NASA-CASE-NXP-07478] c 14 N69-21922
FORD, R. T. Electron multiplier device
[NASA-CASE-ARC-11368-1] c 27 N76-16230
FORD, R. R. Field effect transistor and method of construction thereof
[NASA-CASE-MFS-23312-1] c 35 N78-27328
FOSTER, T. Solar sensor having coarse and fine sensing with improved resolution
[NASA-CASE-MSC-13011-1] c 22 N76-28727
FOSTER, T. V. Multiple internal combustion engine
[NASA-CASE-NPO-13828-1] c 37 N78-11405
FOSTER, T. W. Phase modulator Patent
[NASA-CASE-ARC-10029-1] c 05 N75-26072
FOSTER, J. V. Magnetic position detection method and apparatus
[NASA-CASE-ARC-10179-1] c 21 N72-22619
FOURIER, E. L. Magnetostrictive metal working device Patent
[NASA-CASE-XMF-03792] c 15 N71-24303
FOURIER, T. Variable cycle gas turbines Patent
[NASA-CASE-LAR-12981-1] c 37 N76-17384
FOURIER, T. Variable mass propulsion cycle Patent
[NASA-CASE-LAR-12981-1] c 07 N78-18067
FOUCH, G. L. Process of production of butyrolactone by fermentation in the presence of co-culture of clostridium
[NASA-CASE-MSC-13152-1] c 22 N76-16230
FOWLER, J. T. One-step dual purpose joining technique
[NASA-CASE-LAR-12581-1] c 33 N82-26571
FOWLER, J. T. Induction heating gun
[NASA-CASE-LAR-13181-1] c 33 N83-29591
FOX, W. E. Event recorder Patent
[NASA-CASE-XLA-01802] c 14 N71-21006

Personal Author Index

PERSONAL AUTHOR INDEX
B-24

PERSONAL AUTHOR INDEX
KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]

KALVINSKAS, J. J.

[Database Index]
PERSONAL AUTHOR INDEX

KRAUSE, S. J.
KRIEVE, W. F.
KRAUSHAAR, W. L.
KUBIK, J. S.
KUEBLER, M. E.
KUBOKAWA, C. C.
KUBICZ, A. P.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
KUBICZ, A. P.
KUBICA, A. J.
KUBOKAWA, C. C.
KUBICA, A. J.
KREISMAN, W. E.
KRAY, W. D.
PERSONAL AUTHOR INDEX

MASON, R. M.
MASEK, T. D.
MATEER, O. C.
MASSEY, W. A.
MASON, R. J.
MATTAUCH, R. J.
MATSUHIRO, D. S.
MATHENEY, J. L.
MASSUCCO, A. A.
MAULIN, D. a
MATZEN, W. J.
MAXWELL, R. F, JR.
MAXWELL, M. W.
MAXWELL, H. G.
MAXWELL, A. A.
MAXWELL, M. S.
MAXWELL, W. A.
MAXWELL, M. N.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
MAXWELL, M. S.
Support assembly for cryogenically coolable low-noise quantum waveguides Patent

HCCROBY, R. A.

Mechatronics, H. O.

B-44

HCGEOE, R. O.

Mechatronics, R. M.

MCGONIWAY, T. J.

Electrooptic sample insertion Patent

MCGREGB, B.

MCGREEV, D. L.

Reinforced metallic composites Patent

MCGREEY, O.

MCGREEY, B. R.

MCGREEY, D. R.

MCGREEY, R.

MCGREEY, R. T.

MCGREEY, W.

MCGREEY, W. T.

MCGREEY, W. V.

MCGREEY, W. V.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.

MCGREEY, W.
PERSONAL AUTHOR INDEX

MERRBAUM, S.
UERLEN, M. M.
UERHAV, J. J.
MERRILL, J. T., IV
ME5SNER, A.
MICHAEL, J. E.
METCALFE, A. Q.
MICHAUD, R. B.
MIEYER, T. N.
MIEYER, A. J., JR.
Middleditch, J. W.
MILLER, B. A.
MILLEN, E. W.
MILES, R. T.
MILES, P. A.
MILDICE, J. W.
MILLS, M. K.
MILL, E.
MILLS, U. K.
MILUKEN, D. B.
MILUOAN, A. C.
MILLER, J. L.
MILLER, J. C.
MILLER E. L.
MILLER, E.
MILLER, D. P.
MILLER, W. N.
MILLER, W. N.
MILLER, W. Y.
MILLIGAN, G. C.
MILLS, B. A.
MILLS, D. B.
MILLS, M. K.

Digital control of diode laser for atmospheric spectroscopy
[NASA-CASE-NPO-16000-1] c 36 N83-24842
Superconducting stabilized laser with fine line center offset frequency control
[NASA-CASE-NPO-15156-1] c 36 N84-22943
MERIN, G.
Autonomous navigation system
[NASA-CASE-XAC-ARCS-11257-1] c 04 N81-21047
MERLEN, M. M.
Horton sensor with a plurality of fluidic positioned radiation compensated radiation sensitive detectors
[NASA-CASE-XNP-09957] c 14 N71-21086
MERRILL, B. H.
Multifunctional transducer
[NASA-CASE-14326-1] c 52 N81-20700
MERRICK, R. K.
Stabilization of gravity oriented satellites
[NASA-CASE-XAC-01591] c 31 N71-17729
MERRILL, J. T., IV
Apparatus for applying simulator g-forces to an arm of an apparatus
[NASA-CASE-LAR-10550-1] c 09 N74-30597
MIESSENB, B. V.
Superconducting array for modulating component at a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c 37 N78-21554
MESZARS, G.
System for generating timing and control signals
[NASA-CASE-XNP-13025-1] c 33 N75-10519
MERTSHON, J. L.
High frequency filter device
[NASA-CASE-XNP-06209] c 09 N72-25256
METCALFE, B. G.
Method of producing monoflamentary metal patents
[NASA-CASE-XNP-01101] c 18 N71-29040
METZLER, R.
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c 14 N73-28491
MEYER, A. J.
Black-body furnace Patent
[NASA-CASE-XLA-01299] c 33 N71-15625
MEYER, A. J., Jr.
Method and improvements to cooled blackbody Patent
[NASA-CASE-XLA-00092] c 15 N70-32824
Aeriel capsule emergency separation device Patent
[NASA-CASE-XLA-00115] c 03 N73-33334
Space canoe Patent
[NASA-CASE-XLA-00149] c 31 N70-79708
Vehicle parachute and equipment (jetson system Patent
[NASA-CASE-XLA-01186] c 52 N70-36900
Ablation structures Patent
[NASA-CASE-XLA-01186] c 52 N70-36900
Space capsule Patent
[NASA-CASE-XLA-01332] c 31 N73-15623
MEYER, J. A.
Attitude sensing device Patent
[NASA-CASE-XMS-01941-1] c 14 N72-73728
MEYER, M. W.
Time-division multiplexer Patent
[NASA-CASE-XNP-00431] c 09 N70-38998
MEYER, M. W.
High-temperature, high-pressure spherical segment valve Patent
[NASA-CASE-XNP-00074] c 15 N70-34817
MEYER, T. N.
Method of producing silicon dioxide (SIO) for use in microelectronics
[NASA-CASE-NPO-14332-1] c 31 N80-18231
MEYERS, J. L.
Auto covariance computer
[NASA-CASE-LAR-12966-1] c 35 N83-34273
MICALLE, F. J.
Process for the preparation of large-particle-size monosized latices
MICHAEL, C. E.
Connector - Electrical
[NASA-CASE-XLA-01286] c 09 N81-21470
Missle stage separation indicator and stage separator Patent
[NASA-CASE-XLA-00791] c 03 N70-39000
MICHAUD, R. B.
Ultrasound collection device
[NASA-CASE-MSC-16433-1] c 52 N78-27750
Ultrasound collection device
[NASA-CASE-MSC-16433-1] c 52 N78-27750
Ultrasound collection apparatus
[NASA-CASE-MSC-18381-1] c 52 N81-26740
MICHEL, R. E.
Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c 33 N77-21125
Arc control apparatus
[NASA-CASE-NPO-12079-1] c 33 N77-21318
Arc control in compact arc lamps
[NASA-CASE-NPO-12079-1] c 33 N77-22388
Low to high temperature energy conversion system
[NASA-CASE-NPO-13514-1] c 33 N77-22388
Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c 44 N77-32583
Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13736-1] c 44 N77-32583

MILLS, B. A.
Compensating radiometer
[NASA-CASE-XLA-00186] c 14 N75-27486
Heating sensor instrument Patent
[NASA-CASE-XLA-11345-1] c 14 N75-27486
Spherical measurement device Patent
[NASA-CASE-XLA-09683] c 14 N72-25438

MILLS, D. P.
Method of forming diffusional polyethylene Patent
[NASA-CASE-NPO-10893] c 27 N73-22710

MILLS, E.
Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c 33 N77-21125
Arc control apparatus
[NASA-CASE-NPO-12079-1] c 33 N77-21318
Arc control in compact arc lamps
[NASA-CASE-NPO-12079-1] c 33 N77-22388
Low to high temperature energy conversion system
[NASA-CASE-NPO-13514-1] c 33 N77-22388
Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c 44 N77-32583
Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13736-1] c 44 N77-32583

MILLS, M. K.
Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c 33 N77-21125
Arc control apparatus
[NASA-CASE-NPO-12079-1] c 33 N77-21318
Arc control in compact arc lamps
[NASA-CASE-NPO-12079-1] c 33 N77-22388
Low to high temperature energy conversion system
[NASA-CASE-NPO-13514-1] c 33 N77-22388
Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c 44 N77-32583
Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13736-1] c 44 N77-32583

MILLS, M. K.
Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c 33 N77-21125
Arc control apparatus
[NASA-CASE-NPO-12079-1] c 33 N77-21318
Arc control in compact arc lamps
[NASA-CASE-NPO-12079-1] c 33 N77-22388
Low to high temperature energy conversion system
[NASA-CASE-NPO-13514-1] c 33 N77-22388
Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c 44 N77-32583
Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13736-1] c 44 N77-32583
MULLER, K.

Electric arc light source having undercut recessed anode

MULLER, R. M.

Method and apparatus for measuring web material wound on a reel

MULLIKEN, R. F.

Method of repairing discontinuity in fiberglass structures

MUNFORD, J. A.

Laser measuring system for incremental assembly

MUNRO, R. M.

High efficiency multilayer pressure

MURPHY, W. J.

Method of preparing the same Patent

MURPHY, D. W.

Turntable slip antenna

MURPHY, F. L.

Bimetallic power controlled actuator

MURPHY, J. P.

All sky pointing attitude control system

MURPHY, M. V. R. K.

Concave grating spectrometer Patent

MUSICCK, R. O.

Two-way controller Patent

MUSBERT, E. W.

Device for assuring occupant from an ejection seat Patent

MUSKOS, B.

Pressurized disc type sensing electrodes with ion-screening members

MYERS, D. A.

Metal containing polymers from cyclic tetrameric

MYERS, W. N.

Phenylphosphonitrilicides Patent

NAESETH, R. L.

Inorganic structures

NAKANO, B.

Overload protection system for power inverter

NAKANO, S.

Module failure isolation circuit for paralleled inverters

NAKANISHI, S.

Ion thruster cathode Patent Application

NASUTLA, J.

Wound on a reel

NASUTLA, J.

Wound on a reel

NASUTLA, J.

Tape for automatic load sharing in parallel converter

NASUTLA, J.

Module failure Isolation circuit for paralleled inverters

NASUTLA, J.

Regulated high efficiency, lightweight capacitor-diode

NASH, D. O.

High acceleration cable deployment system

NASH, D. O.

System for plotting subsoil structure and method thereof

NASUTLA, J.

System for plotting subsoil structure and method thereof

NATHAN, R.

Amplified wind turbine apparatus:

NAUTAH, R.

System for plotting subsoil structure and method thereof

NAUTAH, R.

System for plotting subsoil structure and method thereof

NAYMARK, E. C.

Method of producing crystalline materials
<table>
<thead>
<tr>
<th>Name</th>
<th>Patent Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>REISH, D. A.</td>
<td>Poly-N-vinylcarbazole complex Patent (NASA-CASE-MSC-10597-1)</td>
</tr>
<tr>
<td>RHEIM, W. K.</td>
<td>Flexible fire retardant foam Patent (NASA-CASE-XLA-02437-1)</td>
</tr>
<tr>
<td>RHEODES, D. B.</td>
<td>Optical scanner Patent (NASA-CASE-LAR-11711-1)</td>
</tr>
<tr>
<td>RHEODES, P. H.</td>
<td>Latching mechanism Patent (NASA-CASE-MSC-15474-1)</td>
</tr>
<tr>
<td>RICCI, D. A.</td>
<td>Method for apparatus for shaping and enhancing acoustical levitation forces</td>
</tr>
<tr>
<td>RICCI, J. M.</td>
<td>Composite sandwich lattice structure Patent (NASA-CASE-XLE-00342-1)</td>
</tr>
<tr>
<td>RICHARDS, R. R.</td>
<td>Method of making a composite sandwich lattice structure Patent (NASA-CASE-LAR-11888-2)</td>
</tr>
<tr>
<td>RICHARD, R. R.</td>
<td>Ultraviolet and thermally stable polymer compositions Patent (NASA-CASE-XNP-09572-1)</td>
</tr>
<tr>
<td>RICKERT, J. M.</td>
<td>Rocket engine Patent (NASA-CASE-LEW-12457-1)</td>
</tr>
<tr>
<td>RILEY, J. F.</td>
<td>Diffuser/ejector system for a very high vacuum environment Patent (NASA-CASE-LEW-13404-1)</td>
</tr>
<tr>
<td>RINEHART, D.</td>
<td>Multispectral linear array multiband selection device Patent (NASA-CASE-GSC-12911-1)</td>
</tr>
<tr>
<td>RISK, R.</td>
<td>Nuclear alkylated pyridine aldehydes polymer compositions and devices thereof Patent (NASA-CASE-XNP-10557-1)</td>
</tr>
<tr>
<td>RISTI, J. J.</td>
<td>Method and apparatus for shaping and enhancing acoustical levitation forces</td>
</tr>
<tr>
<td>RITCHEY, E. A.</td>
<td>Electrode reflectometer including means for averaging the radiation reflected from the sample Patent (NASA-CASE-XNP-09461-1)</td>
</tr>
<tr>
<td>RIVERA, L. A.</td>
<td>Method and apparatus for shaping and enhancing acoustical levitation forces</td>
</tr>
<tr>
<td>RIVETT, R. H.</td>
<td>Flexible fire retardant polyisocyanate modified neoprene Patent (NASA-CASE-XNP-10557-1)</td>
</tr>
<tr>
<td>RUDOLPH, H. L.</td>
<td>Space suit Patent (NASA-CASE-LEW-13504-1)</td>
</tr>
<tr>
<td>RUDOLPH, W. E.</td>
<td>Circuit breaker utilizing magnetic latching relay Patent (NASA-CASE-MSC-11277-1)</td>
</tr>
<tr>
<td>RUEHL, E. A.</td>
<td>Microprocessor-based magnetic latching relays Patent (NASA-CASE-XNP-09461-1)</td>
</tr>
<tr>
<td>RUEHL, R. A.</td>
<td>Low cycle fatigue testing machine Patent (NASA-CASE-LAR-12070-1)</td>
</tr>
<tr>
<td>RUEHLE, D. A.</td>
<td>Low cycle fatigue testing machine Patent (NASA-CASE-LAR-12070-1)</td>
</tr>
<tr>
<td>RUEHLE, R. A.</td>
<td>Low cycle fatigue testing machine Patent (NASA-CASE-LAR-12070-1)</td>
</tr>
<tr>
<td>RUEHLE, R. A.</td>
<td>Low cycle fatigue testing machine Patent (NASA-CASE-LAR-12070-1)</td>
</tr>
<tr>
<td>RUEHLE, R. A.</td>
<td>Low cycle fatigue testing machine Patent (NASA-CASE-LAR-12070-1)</td>
</tr>
<tr>
<td>RUEHLE, R. A.</td>
<td>Low cycle fatigue testing machine Patent (NASA-CASE-LAR-12070-1)</td>
</tr>
</tbody>
</table>
Spray coating apparatus having a rotatable worktable

Inflatable device for installing strain gauge bridges

Variable resistance constant tension and lubrication device

Inserting tool

Apparatus for damping operator induced oscillations of a controlled system

Low pressure phase separator

Isochronous battery Patent

Reversing gantry crane Patent

Polysilicon sensitive circuit Patent

Silica transducible surface insulation

Three laminate structure insulation

Oxidation resistant slurry coating for carbon-based materials

Programmable scan and read circuitry for charged coupled device image sensors

Method of forming thin window drifted silicon carbide particle detector Patent

Counter and shift register Patent

Inductive transducer

Gaseous air intake for a gas turbine engine

Inflatable device for installing strain gauge bridges

Spherical tank gauge Patent

Emergency space-suit helmet

Digital computer cathodoluminescence

Variable resistance constant tension and lubrication device

Thermal insulation protection means

Satellite personal communications system

Balanced bellowb stop valve

Temperature compensated solid state differential amplifier Patent

Transfer valve Patent

Material and apparatus for continuously monitoring blood oxygenation, blood pressure, pulse rate and the pressure pulse curve utilizing an ear oximeter as transducer

Differential pressure control

Particle detection apparatus including a ballistic holder

Inflatable transpiration cooled nozzle

Stable temperature ISFET

Sensor for detecting temperature

Reduced gravity simulator Patent

Improved thermal barrier coating system having improved adhesion

Spray coating apparatus having a rotatable worktable

Spray coating apparatus having a rotatable worktable

Method of making a light weight battery plaque

Method of making membranes

Method for making a lightweight battery plate

Clear air turbulence detector

Focused laser Doppler velocimeter

Method for attaching a fused quartz mirror to a conductive metal substrate

Electric arc device for heating gases Patent

Thermal barrier coating system having improved adhesion

Hollow hydrogen cathode ion source

Texturing polymeric surfaces by spin coating

Ion sputter textured graphite

Ring-cusp ion thruster with shell anode

Micromachined self-deploying boom mechanism

Modification of the electrical and optical properties of polymers

Hydrogen injection system for a gas turbine engine

Deposition of diamond like carbon films

Improved heat exchanger for electrothermal devices

Inflatable transpiration cooled nozzle

Deposition of alloy films

Hall effect magnetometer

Apparatus for measuring thermal conductivity

Error correcting method and apparatus Patent

Space probe/satellite election apparatus for a spacecraft

Variable geometry manned orbital vehicle Patent
VAUQHAN, O. H.

VAUQHAN, O. R.

VAUSIAKOS, N.

VAUQHAN, R. W.

VEHRENCAMP, J. E.

VERMILOU, C. M.

VERMILOU, C. H.

VICK, H. A.

VUKEUCH, E. K.

VUKELICH, E. K.

VUKAN, D. E.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.

VUKAN, R. W.
YOUNGBLUTH, O., JR.
Method and apparatus for mapping the sensitivity of the face of a photodetector specifically a PMT
[NASA-CASE-LAR-10320-1] c 09 N72-23172
Versatile LDV burst simulator
[NASA-CASE-LAR-11859-1] c 35 N79-14349
YOUNGHAMS, J. L.
Curved centerline air intake for a gas turbine engine
[NASA-CASE-LW-13201-1] c 07 N81-14999
YU, I. P.
Multiple band circularly polarized microstrip antenna
[NASA-CASE-MSC-18304-1] c 32 N80-32604

Z
ZABOWER, H. R.
Hand-held photomicroscope
[NASA-CASE-ARC-10466-1] c 14 N73-33381
ZARGAYO, B. A.
Vacuum probe surface sampler
[NASA-CASE-LAR-10623-1] c 14 N73-30395
ZAPATRISKY, I.
Method and apparatus for coating substrates using a laser
[NASA-CASE-LW-13526-1] c 36 N84-22944
ZAREMBKA, J. G.
Passive caging mechanism Patent
[NASA-CASE-GSC-10306-1] c 15 N71-24694
ZARZYCKI, E. V.
Method of improving the reliability of a rolling element system Patent
[NASA-CASE-XLE-02999] c 15 N71-16052
ZAVADA, E. J.
Frangible tube energy dissipation Patent
[NASA-CASE-KLA-06794] c 15 N70-34850
ZAVESKY, R. J.
Improved heat exchanger for electrothermal devices
[NASA-CASE-LW-14037-1] c 20 N84-32435
ZAVIANTEFF, V.
Apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c 14 N72-28484
ZEANAH, H. W.
Filtering device
[NASA-CASE-MFS-22729-1] c 32 N76-21396
ZEBKER, H. A.
Synthetic aperture radar target simulator
[NASA-CASE-NPO-15024-1] c 32 N84-27951
ZEBROWSKI, Z. E.
Attitude control system for sounding rockets Patent
[NASA-CASE-XGS-01854-1] c 31 N71-24750
ZEBUS, P. P.
Adjustable securing base
[NASA-CASE-MSC-19966-1] c 37 N76-17383
ZIEGLER, R. J.
Variable contour securing system
[NASA-CASE-MSC-16270-1] c 37 N76-27423
ZIEGER, R. J.
Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c 37 N74-27901
ZEILLER, G. J.
Gas cooled high temperature thermocouple Patent
[NASA-CASE-XLE-09475-1] c 30 N71-15568
ZEIMAN, J. R.
Lamp modulator
[NASA-CASE-MSC-10565] c 09 N72-25250
ZERGER, R. S.
Constant temperature heat sink for calorimeters Patent
[NASA-CASE-XMF-04208] c 33 N71-29051
ZERLAUT, G. A.
Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XMF-07770-2] c 18 N71-26772
ZERMAT, P. S.
Synthesis of zinc titanate pigment and coatings containing the same
[NASA-CASE-MFS-15332] c 18 N72-17532
ZEMAN, J. R.
Ultrasound transducer with Gaussian radial pressure distribution
[NASA-CASE-LEW-12967-1] c 35 N84-22932
ZEMKE, M. C.
Constant temperature heat sink for calorimeters Patent
[NASA-CASE-XMF-04208] c 33 N71-29051
ZIMMERMAN, B. G.
Sun tracker with rotatable plane-parallel plate and two photoelects Patent
[NASA-CASE-XGS-01159] c 21 N71-10678
ZIMMERMAN, J. E.
Coat-shale interface detection system
[NASA-CASE-MFS-23720-2] c 43 N80-14423
ZIMMERMAN, P. A.
Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c 37 N79-33467
ZIMMERMAN, R. L.
Thermally operated valve Patent
[NASA-CASE-XLE-08815] c 15 N70-35407
ZIMMERMANN, E. J.
Double optic system for ion engine Patent
[NASA-CASE-XNP-02839] c 28 N70-41922
ZIOBLICKI, A. J.
Multi-laser scan horizon sensor Patent
[NASA-CASE-XGS-00809] c 21 N70-35427
ZLATKIS, A.
Analysis of volatile organic compounds
[NASA-CASE-MSC-14428-1] c 23 N77-17161
ZMIGRAD, L. A.
Safety-locking pin
[NASA-CASE-MFS-18495] c 15 N72-11385
ZMIADZINAS, J. S.
Stabilization of Hz, 3 fraction of molecules in liquid helium by optical pumping for vacuum UV laser Patent
[NASA-CASE-NPO-13993-1] c 72 N79-13826
ZHOB, S.
Counting digital filters
[NASA-CASE-NPO-11821-1] c 08 N73-26175
ZUCK, M. A.
Meteosonde capture cell construction Patent
[NASA-CASE-XLE-06590-1] c 11 N74-24750
ZONPO, R. L.
Remote controlled tubular disconnect Patent
[NASA-CASE-XLA-01386] c 03 N71-12259
ZOTTARELLI, L. J.
Noise suppressor
[NASA-CASE-LAR-11141-1] c 07 N74-32418
ZURASKY, J. L.
Magnetic core current steering commutator Patent
[NASA-CASE-NPO-10201] c 08 N71-16664
ZURAWIECKI, W. E.
Drive circuit utilizing two cores Patent
[NASA-CASE-XNP-01318] c 10 N71-26000
ZURASKY, J. L.
Digital memory in which the driving of each word location is controlled by a switch core Patent
[NASA-CASE-XNP-01466] c 10 N71-26434
ZURRER, W. E.
System for monitoring signal amplitude ranges
[NASA-CASE-XMS-04061-1] c 09 N89-39865
ZUCCARDO, J. D.
Electrode construction Patent
[NASA-CASE-ARC-10045-1] c 05 N71-11199
ZUCKERWASSER, A. J.
Instruments for measuring of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c 35 N75-19614
Instruments for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c 07 N76-27222
Differential sound level meter
[NASA-CASE-LAR-12106-1] c 71 N78-14860
High-temperature microphone system
[NASA-CASE-LAR-12375-1] c 32 N79-24203
Flow resistivity instrument
[NASA-CASE-LAR-13533-1] c 43 N83-29783
Acoustic ground impedance meter
[NASA-CASE-LAR-12995-1] c 35 N84-22693
ZUSKINS, J. L.
Monitoring deposition of films
[NASA-CASE-MFS-20675] c 26 N73-26751
ZWIENER, J. M.
Real time reflectometer
[NASA-CASE-MFS-23118-1] c 35 N77-31465
ZYGIELBAUM, A. I.
Communications link for computers
[NASA-CASE-MPO-11191] c 08 N72-25207
Digital video display system using cathode ray tube
[NASA-CASE-MPO-11342] c 09 N72-25248
Numerical computer peripheral interactive device with manual controls
[NASA-CASE-NPO-11247] c 08 N73-25208
Digital demodulator-correlator

B-75
Adaptive control system for line-commutated inverters [NASA-CASE-MFS-25205-1] c 33 N83-35227
Inverter with means for base current shaping for sweeping charge carriers from base region Patent [NASA-CASE-XGS-06236] c 10 N71-25950
Army Mobility Research and Development Lab., Hampton, Va. Helicopter anti-torque system using strakes [NASA-CASE-LAR-13233-1] c 05 N84-33400
Army Aviation Research and Development Command, Moffett Field, Calif. Glitchesless multiple drive source for output shaft [NASA-CASE-ARC-11025-1] c 37 N82-22496
Aerojet-General Corp., Sacramento, Calif. Integrated lift/drag controller for aircraft [NASA-CASE-ARC-10456-1] c 05 N75-12930
Adaptive control system for line-commutated inverters [NASA-CASE-MFS-25205-1] c 33 N83-35227
Inverter with means for base current shaping for sweeping charge carriers from base region Patent [NASA-CASE-XGS-06236] c 10 N71-25950
Army Mobility Research and Development Lab., Hampton, Va. Helicopter anti-torque system using strakes [NASA-CASE-LAR-13233-1] c 05 N84-33400
Army Aviation Research and Development Command, Moffett Field, Calif. Glitchesless multiple drive source for output shaft [NASA-CASE-ARC-11025-1] c 37 N82-22496
Battelle Northwest Labs, Richland, Wash.

Preparation of high purity copper fluoride
[NASA-CASE-LEW-10794-1] c 06 N72-17093

Beallans and Lunde, Inc., Rochester, N. Y.
Patent type objective including field shaping lens
[NASA-CASE-GSC-10700] c 23 N71-30027

Bendix Research Labs, in a Illumination system including a virtual light source
[NASA-CASE-HQN-10791] c 23 N71-30292

Baylor Univ., Houston, Tex.
Bioreactor and method of operation Patent
[NASA-CASE-ARC-12982-1] c 05 N71-24729

Bendix Cooperation, Detroit, Mich.
Compressive biological electrode
[NASA-CASE-ARC-12968] c 05 N72-27103

Bedion Instruments, Inc., Anaheim, Calif.
Process for making a bimetallic device
[NASA-CASE-14605-1] c 37 N77-28487

Bedion Instruments, Inc., Fullerton, Calif.
Process activated po ligathanogic hydrogen detector
[NASA-CASE-XMF-50531] c 14 N71-17575

Bendix Aircraft Corp., Wichita, Kans.
Electrochemical divider and multiplier using photocell Patent
[NASA-CASE-67587] c 09 N71-18490

Birge generating circuit employing switch means on ends of delay line for alternately charging and discharging same Patent
[NASA-CASE-XPN-00745] c 10 N72-28960

Bendix Aerospace Co., Buffalo, N. Y.
Gas operated actuator Patent
[NASA-CASE-GSC-11479-1] c 15 N72-33447

Bendix Aerospace Co., South Pasadena, Calif.
Rheumatic system for controlling and actuating pneumatic devices
[NASA-CASE-XMF-50483] c 05 N81-21469

Becton, Dickenson and Co., Rutherford, N.J.
Pulse landing craft research vehicle Patent
[NASA-CASE-LAR-10625-1] c 14 N73-30995

Beech Aircraft Corp., Wichita, Kans.
X-ray determination of parts alignment
[NASA-CASE-MSC-20414-1] c 37 N83-17882

Bell Aerospace Co., Buffalo, N. Y.
Modulator and tone binary signals
[NASA-CASE-GSC-11743-1] c 32 N75-24981

Communications device
[NASA-CASE-GSC-11744-1] c 33 N75-26243

Bell Aerospace Co., Buffalo, N. Y.
Low gravity phase separator
[NASA-CASE-XNP-02095] c 14 N71-17575

Firing system circuit Patent
[NASA-CASE-XLA-50896] c 15 N72-12408

Bellcomm, Inc., Washington, D.C.
Celluar correction filter for improving the optical quality of an image
[NASA-CASE-HQN-10545-1] c 74 N75-25706

Circuit breaker utilizing magnetic latching relay Patent
[NASA-CASE-ARC-11093-1] c 74 N75-26254

Bellcomm, Inc., Columbus, Ohio.
Microwave dichroic plate
[NASA-CASE-OCS-12171-1] c 33 N79-24820

Bendix Corp., Dayton, Iowa.
Laser control valve
[NASA-CASE-MSC-13567-1] c 15 N73-30459

Bendix Corp., Detroit, Mich.
Deflector valve and vehicle wheel Patent
[NASA-CASE-MFS-20400] c 31 N71-18611

Bendix Corp., Huntsville, Ala.
Multi axis vibration figures
[NASA-CASE-MFS-20242] c 14 N73-19421

Bendix Corp., Kennedy Space Center, Fla.
Color perception tester
[NASA-CASE-KSC-10276] c 05 N72-10015

Bendix Corp., Kingsport, N. J.
Evacuation valve
[NASA-CASE-ARC-10961-1] c 15 N72-13483

Bendix Research Labs, Southfield, Mich.
Image tube
[NASA-CASE-GSC-11690-1] c 33 N74-21850

Bionetics Corp., Hampton, Va.
Small conductive particle sensor
[NASA-CASE-LAR-12552-1] c 35 N82-11431
CORPORA TE SOURCE

General Electric Co., Cleveland, Ohio.
Variable thrust nozzle for quiet turbofan engine and
method of operating same
[NASA-CASE-LEW-12317-1]
c 07 N78-170S5
Gas turbine engine with convertible accessories
INASA-CASE-LEW-12390-1]
c 07 N78-17056
Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1]
c 37 N78-17384
Gas turbine engine with racirculating bleed
[NASA-CASE-LEW-12452-1]
c07 N78-2S089
Redundant disc
[ NASA-CASE-LEW-12496-1 ]
c 07 N78-33101
Fuel delivery system including heat exchanger means
[NASA-CASE-LEW-12793-1]
c 37 N79-11403
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-3]
c 07 N79-14038
Variable area exhaust nozzle
[NASA-CASE-LEW-12378-1]
c 07 N79-14097
Sound-suppressing structure with thermal relief
[NASA-CASE-LEW-12658-1]
c 71 N79-14871
Method and apparatus for rapid thrust increases in a
tuibofan engine
[NASA-CASE-LEW-1297M]
c 07 N80-18039
Curved centerfine air intake for a gas turbine engine
[NASA-CASE-LEW-13201-1]
C 07 N81-14999
Apparatus for sensor failure detection and correction
in a gas turbine engine control system
[NASA-CASE-LEW-12907-2]
c 07 N81-19115
Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2]
c 07 N81-19116
Thrust reverser for a long duct fan engine
[NASA-CASE-LEW-13199-1]
c 07 N82-262S3
Control means for a gas turbine engine
[NASA-CASE-LEW-14586-1]
c 07 N83-31603
Apparatus for improving the fuel efficiency of a gas
turbine engine
[NASA-CASE-LEW-13142-1]
c 07 N83-36029
Tip cap for a rotor blade
[NASA-CASE-LEW-13654-1]
c 07 N84-22560
Air modulation apparatus
[NASA-CASE-LEW-13524-1]
C 07 N84-33410
General Electric Co, Cleveland, Onto.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1]
c 07 N78-18067
General Electric Co, Philadelphia, Pa
Catalyst for growth of boron carbide single crystal
whiskers
[NASA-CASE-XHO-03903]
c 15 N69-21922
Didymium hydrate additive to nickel hydroxide electrodes
Patent
[NASA-CASE-XGS-03505]
c 03 N71-10608
Bismuth-lead coatings for gas bearings used In
atmospheric environments and vacuum chambers Patent
[NASA-CASE-XGS-02011]
CIS N71-20739
Automatic control of liquid cooling garment by cutaneous
and external auditory meatus temperatures
[NASA-CASE-MSC-13917-1]
COS N72-15098
Method for measuring cutaneous sensory perception
[NASA-CASE-MSC-13609-1]
c OS N72-2S122
Reaction tester
[NASA-CASE-MSC-13604-1]
COS N73-13114
Air conditioned suit
[NASA-CASE-LAR-10076-1]
COS N73-20137
Compton scatter attenuation gamma ray spectrometer
[NASA-CASE-MFS-21441-1]
c 14 N73-3O392
Inverter ratio failure detector
[NASA-CASE-NPO-13160-1]
c 35 N74-18090
Electrophoretic sample insertion
[NASA-CASE-MFS-21395-1]
c 25 N74-26948
Apparatus for conducting flow electrophoresis in the
substantial absence of gravity
[NASA-CASE-MFS-21394-1]
c 34 N74-27744
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13801-2J
c 54 N75-27759
Automatic biowaste sampling
[NASA-CASE-MSC-14640-1]
c 54 N76-14804
Solar cell module
[NASA-CASE-NPO-14487-1 ]
c 44 N79-31753
Voltage feed through apparatus having reduced partial
discharge
[NASA-CASE-GSC-12347-1]
c 33 N80-18286
General Electric Co, Ptesoanton, Cant.
Method of making a cermet Patent
[NASA-CASE-LEW-10219-1]
c 18 N71-28729
General Electric Co, Schenectady. N. Y.
Superconductive accelerometer Patent
[NASA-CASE-XMF-01099]
c 14 N71-15969
Remote manipulator system
[NASA-CASE-MFS-22022-1]
c 37 N76-15460
Automatic transponder
[NASA-CASE-GSC-12075-1]
c 32 N77-31350
Directionalry solidified sutectic gamma plus beta
nickel-base superalloys
[NASA-CASE-LEW-12906-1]
c 28 N77-32279

C-4

Genorel Electric Co, Utteo, N. Y.
Method of determining bond quality of power transistors
attached to substrates
[NASA-CASE-MFS-21931-1]
c 37 N7S-26372
Genend Uotoro Corp, Dotrott, Utoh.
Hermetic sealed vibration damper Patent
[NASA-CASE-MSC-10959]
c 15 N71-26243
General Hotoro Corps unoauttoo, Wta.
Adjustable tension wire guide Patent
[NASA-CASE-XMS-02383]
C 15 N71-15918
Gonoral Hotoro Corp, Santa Barbara, Com.
Resilient wheel Patent
[NASA-CASE-MFS-13929]
c 15 N71-27091
Genord Proctoton, me, LtWo FoJto, NJ.
Reversible current control apparatus Patent
[NASA-CASE-XLA-09371]
c 10 N71-18724
Gonoral Proddon, Inc, Surmyvoto, Ccflf.
Broadband video process with very high input
impedance
[NASA-CASE-NPO-10199]
c 09 N72-17156
Gonoral Precision Syotomo, Inc, LrrUo Fctto, NJ.
Ruidic-tnermocrirorroc display device Patent
[NASA-CASE-ERC-10031]
c 12 N71-18603
Gonoral Tochnotogloo Corp, Rooton, Va
Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1]
c 24 N77-19171
Qcophyolco Corp. of America, Bedford, HOBS.
Inflation system for balloon type satellites Patent
[NASA-CASE-XGS-03351]
c31 N71-16081
Bakeable McLeod gauge
[NASA-CASE-XG&01293-1]
c 35 N79-334SO
Goaohydco Corp. of America, Boston, Mooa.
Ionospheric battery Patent
[NASA-CASE-XG&01593J
c 03 N70-35408
Gooroo Washington Unlv, Washington, D.C.
Bacteria detection instrument and method
[NASA-CASE-GSC-11533-1]
c 14 N73-13435
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1]
c 52 N74-27568
Oloimtnl Sdontfflc Corp, Santa Ana, CoJH.
Electric arc light source having undercut recessed
[NASA-CASE-ARC-10266-1]
c 33 N75-29318
Combination automatic-starting electrical plasma torch
and gas shutoff valve
[NASA-CASE-XLE-10717]
c 37 N75-29426
Qlnor, Inc, Worthom, Booa
Catalyst surfaces for the chromous/chromfc redox
couple
[NASA-CASE-LEW-13148-1]
c 33 N80-2O487
Catalyst surfaces for the chromous/chromic redox
couple
[NASA-CASE-LEW-13148-2]
c 44 N81-29524
aiobc-Unlon, Inc, KUhmuJtoo, Wto.
Method of coating solar cell with boroslllcate glass and
resultant product
[NASA-CASE-GSC-11514-1]
c 03 N72-24037
Ooodyoor Aoroopoco Corp, Akron, Onto.
FokJable solar concentrator Patent
[NASA-CASE-XLA-04622]
c 03 N70-41580
Method of making a filament-wound container Patent
[NASA-CASE-XLE-03803-2]
c 15 N71-17651
Filament wound container Patent
[NASA-CASE-XLE-03803]
CIS N71-23818
Panefaed high performance multilayer Insulation
Patent
[NASA-CASE-MFS-14023]
c 33 N71-253S1
Thermally activated foaming compositions Patent
[NASA-CASE-LAR-10373-1]
C 18 N71-26155
Compression test assembly
[NASA-CASE-LAR-10440-1]
c 14 N73-32323
Deptoyable flexible tunnel
[NASA-CASE-MFS-22838-1 ]
c 37 N76-22540
Qraco (W. R.) and Co, Ctotovfflo, Bd.
Metal containing polymers from cyclic tetrameric
phenylphosphonitrilamides Patent
[NASA-CASE-HQN-10364]
c 06 N71 -27383
Grumman Aoroopoco Corp, Bothpooo, N.Y.
Multi-leg heat pipe evaporator
[NASA-CASE-MSC-20812-1]
c 34 N84-32748
Improved monogroove heat pipe design: Insulated liquid
channel with bridging wick
[NASA-CASE-MSC-20497-1 ]
c 34 N84-34692
Grumman Aircraft Engineering Corp, Bothpago, N. Y.
Sealed cabinetry Patent
[NASA-CASE-MSC-12168-1]
c 09 N71-18800
Out of tolerance warning alarm system for plurality of
monitored circuits Patent
[NASA-CASE-XMS-10984-1]
c 10 N71-19417
Gulf General Atomic, San Dtogo, Com.
Waveform simulator Patent
[NASA-CASE-NPO-10251]
c 10 N71-27385
Gutton Industries, Inc, Albuquerque, MJSox.
Analog-to-digital converter
[NASA-CASE-MSC-13110-1]
c 08 N72-22163

H
HomOton Standard, Hartford, Conn.
Slow opening valve
[NASA-CASE-MSC-20112-1]
c 37 N82-28841
Hamilton Standard, Windsor Loetto, Com.
Venting device for pressurized space suit helmet
Palm it
[NASA-CASE-XMS-09652-1]
COS N71-26333
Regenerate device for scrubbing breathable air of CO2
and moisture without special heat exchanger equipment
[NASA-CASE-MSC-14771-1]
c 54 N77-32722
Csfl and method for electrolysis of water and anode
[NASA-CASE-MSC-16394-1]
c 28 N81-24280
HcmOton Standord Dtv, Unttod Alrcratl Corp, Kfbxtoor
LocbaCom.
Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1]
c 77 N75-20139
Honto Corp, C3o4boumo, Fta.
Adaptive polarization separation
[NASA-CASE-LAR-12196-1]
c 33 N81-26358
Toloscoping columns
[NASA-CASE-LAR-12195-1]
c 31 N81-27324
Kayos Intomattonal Corp, Birmingham, Ala
Space craft sort landing system Patent
[NASA-CASE-XMF-02108]
c 31 N70-36845
Device for preventing high voltage arcing In electron
beam welding Patent
[NASA-CASE-XMF-08522]
CIS N71-19488
Hoyoo IntomoUonal Corp, HuntovOlo, Ala
Method and apparatus for cryogenic wire snipping
Patent
[NASA-CASE-MFS-10340]
c 15 N71-17628
Self-balancing strain gage transducer Patent
[NASA-CASE-MFS-12827]
c 14 N71-17656
Automatic closed circuit television arc guidance control
Patent
[NASA-CASE-MFS-13048]
c 07 N71-19433
Hoztoton Lobs, Fcfto Church, Va
Use of the enzyme hexoklnase for the reduction of
inherent light levels
[NASA-CASE-XGS-05533]
c 04 N69-27487
Light detection instrument Patent
[NASA-CASE-XGS-05534]
c 23 N71-16355
LyopNIized reaction mixtures Patent
[NASA-CASE-XGS-05532]
c 06 N71-1770S
Firefly pump-metering system
[NASA-CASE-GSC-10218-1]
CIS N72-21465
Horcutoo, Inc, WKmmgton, Dd
Method of repairing discontinuity in fiberglass
structures
[NASA-CASE-LAR-10416-1]
c 24 N74-30001
Hoffman EtoctronJca Corp, El KJonto, CcSf.
Method for producing a solar cell having an integral
protective covering
[NASA-CASE-XGS-04531]
c 03 N69-24267
Honoyuofl, Inc, HopEdno, Cutout. .
Frequency control network for a current feedback
oscillator Patent
[NASA-CASE-GSC-10041-1]
c 10 N71-19418
HonoycroD, Inc, MlrmoopoUo, Hlrm.
Bus voltage compensation circuit for controlling direct
current motor
[NASA-CASE-XMSO4215-1J
c 09 N69-39987
Apparatus for overcurrent protection of a push-puH
amplifier Patent
[NASA-CASE-MSC-12033-1]
COS N71-13531
Static inverter Patent
[NASA-CASE-XGS-05289]
c 09 N71-19470
High impedance measuring apparatus Patent
[NASA-CASE-XMS-08589-t]
c 09 N71-20569
Clamping assembly for Inertia! components Patent
[NASA-CASE-XMS-02184]
c 15 N71-20813
Piezoelectric pump Patent
(NASA-CASE-XNP-05429J
c 26 N71-21824
Controllers Patent
[NASA-CASE-XMS-07487]
c 15 N71-23255
Convofuting dovtco for forming convolutions And tho liko
Patent
[NASA-CASE-XNP-05297]
CIS N71-23811
Failure sensing and protection circuit for converter
networks Patent
[NASA-CASE-GSC-10114-1]
c 10 N71-27366
Voice operated controller Patent
[NASA-CASE-XLA-04063]
c 31 N71-33160
Load current sensor for a series pulse width modulated
power supply
[NASA-CASE-GSC-10656-1]
c 09 N72-2S249
Radiant source tracker independent of nonconstant
trradiance
[NASA-CASE-NPO-11688]
c 14 N73-25462
OptJc&l Instnundnts
[NASA-CASE-MSC-14096-1)
c 74 N74-15095
Method of forming shflnk-fit compression seal
[NASA-CASE-LAR-11563-1]
c 37 N77-23482


Corporation Source

Enhanced efficiency

Hydroxyl groups and process for producing same

Thermoplastic matrix polymer

Cooled echelle grating spectrometer

Miniature cyclotron resonance ion source using small permanent magnet

Silicon containing solid propellant

System for sifting silicon wafers

NASA CASE-NPO-14006-1

Jet Propulsion Lab., California Inst. of Tech., Pasadena.

NASA CASE-NPO-13899-1

NASA CASE-NPO-14191-1

NASA CASE-NPO-13823-1

NASA CASE-NPO-14054-1

NASA CASE-NPO-13877-1

NASA CASE-NPO-14173-1

NASA CASE-NPO-13970-1

NASA CASE-NPO-14170-1

NASA CASE-NPO-14035-1

NASA CASE-NPO-13880-1

NASA CASE-NPO-13978-1

China.

Power control for hot gas engines

Thermal reactor

System and method for character recognition

Enhancement of in vitro guayule propagation

Acoustic wave methods and apparatus

Interferometric locating system

Speed control device for a heavy duty shaft

Echo tracker/range finder for radars and sonars

Submillimeter wave Schottky barrier diode with low impedance

Beam forming network

Low cost cryostat

Solar energy receiver for a stirling engine

Autonomous air jet air-conditioner utilizing solar and motor waste heat

Efficiency of silicon solar cells containing chromium

Method and apparatus for calibrating the ionosphere and application to surveillance of geophysical events

Laser gas laser element and apparatus

Thermochromic composition of hydrogels

Method of forming frozen spheres in a force-free drop tower

Method and apparatus for Data X synthetic aperture radar imaging of electromagnetic current

High power metal halide laser

Arrangement for damping the resonance in a laser dye

Method and apparatus for transfer function simulator for testing complex systems

Improved ingot slicing machine

Method of Fabricating Schottky barrier solar cell

Acoustic particle separation

Water level indicators for gas pipelines

Method and apparatus for conversation control of metallic halide vapor density in a metallic halide laser

Relay for achieving a content of complex systems

Jet Propulsion Lab., California Inst. of Tech., Pasadena.

Enhancement of in vitro guayule propagation

Thermal reactor

System and method for character recognition

Enhancement of in vitro guayule propagation

Acoustic wave methods and apparatus

Interferometric locating system

Speed control device for a heavy duty shaft

Echo tracker/range finder for radars and sonars

Submillimeter wave Schottky barrier diode with low impedance

Beam forming network

Low cost cryostat

Solar energy receiver for a stirling engine

Autonomous air jet air-conditioner utilizing solar and motor waste heat

Efficiency of silicon solar cells containing chromium

Method and apparatus for calibrating the ionosphere and application to surveillance of geophysical events

Laser gas laser element and apparatus

Thermochromic composition of hydrogels

Method of forming frozen spheres in a force-free drop tower

Method and apparatus for Data X synthetic aperture radar imaging of electromagnetic current

High power metal halide laser

Arrangement for damping the resonance in a laser dye

Method and apparatus for transfer function simulator for testing complex systems

Improved ingot slicing machine

Method of Fabricating Schottky barrier solar cell

Acoustic particle separation

Water level indicators for gas pipelines

Method and apparatus for conversation control of metallic halide vapor density in a metallic halide laser

Relay for achieving a content of complex systems

Jet Propulsion Lab., California Inst. of Tech., Pasadena.

Electronic scanning spacecraft communication system

- [NASA-CASE-NPO-15599-1] c 35 N83-19970
- High production shuffle car system for coal mine
- [NASA-CASE-NPO-15494-1] c 37 N83-20155
- Antireflective or dielectric structure
- [NASA-CASE-NPO-16036-1] c 37 N83-20157
- Method and apparatus for contour mapping using synthetic aperture radar
- [NASA-CASE-NPO-15939-1] c 43 N83-20324
- Multicomputer communication system
- Controlled in situ etch-back process
- [NASA-CASE-NPO-15515-1] c 76 N82-20789
- Method of making micromotorylal or single crystal semiconductive material and products produced thereby
- [NASA-CASE-NPO-15354-1] c 76 N82-21196
- Stabilized lanthanum sulphur compounds
- [NASA-CASE-NPO-16135-1] c 25 N82-24572
- Spin-on-base-resistor for testing for proper fabrication of integrated circuit
- [NASA-CASE-NPO-16021-1] c 33 N82-24769
- Digital control of diode laser for atmospheric spectroscopy
- [NASA-CASE-NPO-16001-1] c 36 N82-24842
- Mobile sampler for use in acquiring samples of terrestrial atmospheric gases
- [NASA-CASE-NPO-15220-1] c 45 N82-25217
- System and method for moving a probe to follow movements of targets
- [NASA-CASE-NPO-15197-1] c 52 N82-25348
- Method for making a bonded single mode fibre optic connector
- [NASA-CASE-NPO-15464-1] c 74 N82-25540
- Optical system
- [NASA-CASE-NPO-15501-1] c 74 N82-25541
- Waveguide cooling system
- [NASA-CASE-NPO-15401-1] c 32 N82-27085
- Particle analysis method and apparatus
- [NASA-CASE-NPO-15292-1] c 35 N82-27184
- Optical gas probe micromachined for leak detection
- [NASA-CASE-NPO-16027-1] c 33 N82-27205
- Production of butanol by fermentation in the presence of glucose
- [NASA-CASE-NPO-16203-1] c 44 N82-29008
- X-ray imaging mirror system and method of producing the same
- [NASA-CASE-NPO-15826-1] c 74 N82-30222
- Method for growing low defect, high purity crystalline layers
- [NASA-CASE-NPO-15813-1] c 76 N82-30269
- Hydrodesulfurization of chlorinated coal
- [NASA-CASE-NPO-15343-1] c 25 N82-31743
- Method and apparatus for producing gas-filled hollow spherical particle
- [NASA-CASE-NPO-14594-3] c 31 N82-31896
- Cycling Joule-Thomson refrigeration
- [NASA-CASE-NPO-15251-1] c 43 N82-31987
- Multibeam single frequency synthetic aperture radar processor for generating synthetic aperture range images
- [NASA-CASE-NPO-14525-2] c 32 N82-31918
- Method and device for detection of a substance
- [NASA-CASE-NPO-15252-1] c 33 N82-31954
- System for monitoring physical characteristics of fluids
- [NASA-CASE-NPO-15400-1] c 34 N82-31993
- Optical sensor
- [NASA-CASE-NPO-14938-1] c 47 N82-32232
- Directional multiport memory architecture
- [NASA-CASE-NPO-15342-1] c 60 N82-32242
- Acoustic system for material transport
- [NASA-CASE-NPO-15453-1] c 71 N82-32515
- System for controlled acoustic rotation of objects
- [NASA-CASE-NPO-15522-1] c 71 N82-32518
- Portable laser remote system for methane gas detection
- [NASA-CASE-NPO-15790-1] c 36 N82-32137
- Mixed polyvalent-monovalent metal coating for carbon-graphite fibers
- [NASA-CASE-NPO-14997-1] c 24 N82-32290
- Antenna grout replacement system
- [NASA-CASE-NPO-15202-1] c 27 N82-34043
- Semiconductor method and apparatus
- [NASA-CASE-NPO-15070-1] c 31 N82-35176
- Resistors for laser diode laser amplifier
- [NASA-CASE-NPO-15201-1] c 36 N82-35550
- Acoustic bubble removal method
- [NASA-CASE-NPO-15324-1] c 71 N82-35781
- Method of increasing minor carrier lifetime in silicon web or the like
- [NASA-CASE-NPO-15530-1] c 78 N82-35688
- Tower evaporator
- [NASA-CASE-NPO-15609-1] c 25 N82-36119
- Portable bed coating liquidation
- [NASA-CASE-NPO-15691-1] c 25 N82-36120
- Fluidized bed liquidation of biomass
- [NASA-CASE-NPO-15907-1] c 25 N82-36121


Variable thrust ion drive utilizing thermally decomposable solid fuel Patent
- [NASA-CASE-NPO-15789-1] c 76 N84-32620
- Kelles Industries Inc, Hudson, N. Y.

Thin film structure including coated strips thrust launched upon ionization release Patent
- [NASA-CASE-PAS-24967-1] c 07 N81-28979

Kentucky Univ., Lexington

Apparatus for determining changes in limb volume
- [NASA-CASE-MSc-18759-1] c 52 N82-27578

KineLogic Corp., Pasadena, Calif.

Excitation and detection circuit for a flux responsive magnetic field
- [NASA-CASE-XNP-04182] c 09 N82-24193

Telemetry system and apparatus for the provision thereof Patent
- [NASA-CASE-XNP-04953] c 08 N81-19420

Tape recorder and data rate converter Patent
- [NASA-CASE-XNP-22778] c 08 N81-22710

Kollmann Instrument Corp., Elmhurst, N. Y.

Wide angle lung eye relief eyepiece Patent
- [NASA-CASE-XMS-00507-1] c 23 N81-24857

Kollmann Instrument Corp., Syosset, N. Y.

Digital modulator and demodulator Patent
- [NASA-CASE-ERC-10041] c 08 N71-29138

Ritchey-Contem Telescope
- [NASA-CASE-SEE-11814] c 14 N73-30303

Konigberg Instruments, Inc., Pasadena, Calif.

Accelerometer telemetry system
- [NASA-CASE-APL-1944-1] c 17 N76-29347

Korel Corp., New York

Laser apparatus for removing material from rotating object Patent
- [NASA-CASE-MFS-11279] c 16 N71-20400

Lite Systems, Inc., Beachwood, Ohio.

Iodine generator for reclaimed water purification Patent
- [NASA-CASE-MCE-14620-1] c 54 N78-14784

Litton-Vought, Inc., Dallas, Tex.

Latch/ejector unit Patent
- [NASA-CASE-XLA-05358] c 15 N71-24987


Apparatus for measuring thermal conductivity Patent
- [NASA-CASE-XGS-01052] c 14 N71-15992

Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
- [NASA-CASE-MSC-14331-1] c 27 N76-24405

Flame retardant standards for polyurethanes
- [NASA-CASE-MSC-14321-2] c 27 N78-17121

Process for spinning flame retardant elastomeric compositions
- [NASA-CASE-MSC-14331-2] c 27 N78-32262

Heat sealable, flame and abrasion resistant coated fabric
- [NASA-CASE-MSC-15832-1] c 27 N82-16238

Heat sealable, flame and abrasion resistant coated fabric
- [NASA-CASE-MSC-15832-2] c 27 N84-14324

CORPORATE SOURCE
Diversity receiving system with diversity phase lock Patent
[NASA-CASE-XGS-01222] c 10 N71-20641
Signal detection and tracking apparatus Patent
[NASA-CASE-XGS-03502] c 10 N71-20682
Position diversity monopulse tracking receiver Patent
[NASA-CASE-XGS-03501] c 9 N71-20684
System for recording and reproducing a coded data Patent
[NASA-CASE-XGS-03510] c 28 N71-14044
Satellite apparatus for tracking and signal Patent
[NASA-CASE-XGS-02554] c 31 N71-21048
Reaction wheel scanner Patent
[NASA-CASE-XGS-02629] c 14 N71-21082
Nonmagnetic, explosive actuated indexing device Patent
[NASA-CASE-XGS-02644] c 14 N71-21082
Bifilaric dual tone step fork filter with zero backlash characteristic Patent
[NASA-CASE-XGS-02422] c 15 N71-21529
Cooming polisher for aspheric surface of revolution Patent
[NASA-CASE-XGS-04227] c 15 N71-21744
Optical trackers with overlapping reticule on parallel axis Patent
[NASA-CASE-XGS-05715] c 23 N71-10010
Self-aligning reflector Patent
[NASA-CASE-XGS-05189] c 31 N71-16102
Dust particle injector for hypervelocity accelerator Patent
[NASA-CASE-XGS-05628] c 23 N71-16102
Optical tracking with overlapping reticule on parallel axes Patent
[NASA-CASE-XGS-05715] c 23 N71-10010
Angular position and velocity sensing apparatus Patent
[NASA-CASE-XGS-05291] c 23 N71-18341
Angular position and velocity sensing apparatus Patent
[NASA-CASE-XGS-05680] c 14 N71-17885
Orbital-directional anisotropic molecular trap Patent
[NASA-CASE-XGS-05680] c 30 N71-17788
Method of making tubular Patent
[NASA-CASE-XGS-04275] c 15 N71-18279
Passive magnetic recording memory element circuit with blocking oscillator feedback Patent
[NASA-CASE-XGS-05503] c 07 N71-18585
Relay switch with double break contacts Patent
[NASA-CASE-XGS-04756] c 07 N71-18602
Contacting apparatus Patent
[NASA-CASE-XGS-04756] c 07 N71-18693
Steering motor control circuit Patent
[NASA-CASE-XGS-10995] c 2 N71-18772
Traffic control system and method Patent
[NASA-CASE-XGS-10087-1] c 02 N71-18287
Apparatus for measuring current flow Patent
[NASA-CASE-XGS-02419] c 14 N71-19431
Radio-frequency counter Patent
[NASA-CASE-XGS-02444] c 21 N71-19435
Apparatus for computing square roots Patent
[NASA-CASE-XGS-05432] c 07 N71-19437
Apparatus for computing square roots Patent
[NASA-CASE-XGS-04756] c 07 N71-19437
Apparatus for computing square roots Patent
[NASA-CASE-XGS-04756] c 07 N71-19437
Apparatus for battery charge control Patent
[NASA-CASE-XGS-05432] c 07 N71-19437
"Apparatus" for battery charge control Patent
[NASA-CASE-XGS-05432] c 07 N71-19437
Tracking antenna system Patent
[NASA-CASE-XGS-10553-1] c 07 N71-19854
Electronic counter system and method of forming same Patent
[NASA-CASE-XGS-05553-1] c 07 N71-19854
Electronic counter circuit and method of forming Patent
[NASA-CASE-XGS-05553-1] c 07 N71-19854
Amplifier clamping circuit Patent
[NASA-CASE-XGS-04987] c 07 N71-20571
Amplifier clamping circuit for horizon scanner Patent
[NASA-CASE-XGS-04784] c 10 N71-20782
Corporation Source

NASA. Goddard Space Flight Center, Greenbelt, Md.
Reactions of microorganisms in biological samples by measuring light.

A spacecraft and a radiation emitting celestial body assemblies and the products formed thereby.

Reduced pressure and molecular sieves fluids.

Frequency within limits.

Location detector.

Solar array.

Sections.

Rectifiers.

Cosmic dust or other similar outer space particles impact apparatus and technique.

Doppler compensation by shifting transmitted object frequency within limits.

Inrush current limiter.

Balloon-borne equipment.

Honeycomb panels formed of minimal surface periodic tube layers.

Inductive heater including magnetic bearing.

Use of unilluminated solar cells as sunlight detectors for a solar array.

Device for determining the contents of contained gas samples.

Magnet for stabilizing torque between a balance and gondola.

Method and system for ejecting fairing sections from a rocket.

Star scanner.

Star tracking relays and process for the production thereof.

Delaying simultaneous release mechanism.

Doppler compensation by shifting transmitted object frequency within limits.

SignaI-to-noise ratio determination circuit.

Nuclear transformer.

Coordinate source system.

Electrical conductive thimble control costings.

 Delaying simultaneous release mechanism.

Doppler compensation by shifting transmitted object frequency within limits.

Nuclear transformer.

Coordinate source system.

Electrical conductive thimble control costings.

Delaying simultaneous release mechanism.

Doppler compensation by shifting transmitted object frequency within limits.

Nuclear transformer.

Coordinate source system.
<table>
<thead>
<tr>
<th>Description</th>
<th>Catalogue Number</th>
<th>Code</th>
<th>Number</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microwave diode plate</td>
<td>[NASA-CASE-GSC-12171-1]</td>
<td>c 33</td>
<td>N79-28416</td>
<td></td>
</tr>
<tr>
<td>Shock isolator for operating a diode laser on a charging and voltage control</td>
<td>[NASA-CASE-GSC-12297-1]</td>
<td>c 37</td>
<td>N79-28549</td>
<td></td>
</tr>
<tr>
<td>Toggle mechanism for pinching metal tubes</td>
<td>[NASA-CASE-GSC-12174-1]</td>
<td>c 37</td>
<td>N79-28550</td>
<td></td>
</tr>
<tr>
<td>Thermal control cartridge</td>
<td>[NASA-CASE-GSC-12253-1]</td>
<td>c 34</td>
<td>N79-31523</td>
<td></td>
</tr>
<tr>
<td>Welded high temperature boiler systems</td>
<td>[NASA-CASE-GSC-12085-1]</td>
<td>c 35</td>
<td>N79-31462</td>
<td></td>
</tr>
<tr>
<td>Bakeable McLeod gauge</td>
<td>[NASA-CASE-GSC-12087-1]</td>
<td>c 35</td>
<td>N79-33450</td>
<td></td>
</tr>
<tr>
<td>Fluid pressure balanced seal</td>
<td>[NASA-CASE-GSC-12088-1]</td>
<td>c 35</td>
<td>N79-33469</td>
<td></td>
</tr>
<tr>
<td>Antenna deployment mechanism for use on a spacecraft</td>
<td>[NASA-CASE-GSC-12331-1]</td>
<td>c 18</td>
<td>N80-14183</td>
<td></td>
</tr>
<tr>
<td>Coupling device for moving vehicles</td>
<td>[NASA-CASE-GSC-12237-1]</td>
<td>c 36</td>
<td>N80-14384</td>
<td></td>
</tr>
<tr>
<td>Voltage feed through apparatus having reduced partial discharge</td>
<td>[NASA-CASE-GSC-12347-1]</td>
<td>c 33</td>
<td>N80-18286</td>
<td></td>
</tr>
<tr>
<td>Distributed switch diode ratiometers</td>
<td>[NASA-CASE-GSC-12273-1]</td>
<td>c 25</td>
<td>N80-18359</td>
<td></td>
</tr>
<tr>
<td>Method and apparatus for holding two separate metal pieces together for welding</td>
<td>[NASA-CASE-GSC-12319-1]</td>
<td>c 37</td>
<td>N80-23665</td>
<td></td>
</tr>
<tr>
<td>Light modulation on a single edge on an optical device</td>
<td>[NASA-CASE-GSC-12348-1]</td>
<td>c 74</td>
<td>N80-24191</td>
<td></td>
</tr>
<tr>
<td>JFET oscillator</td>
<td>[NASA-CASE-GSC-12555-1]</td>
<td>c 32</td>
<td>N80-26061</td>
<td></td>
</tr>
<tr>
<td>Scannable beam forming interferometer array system</td>
<td>[NASA-CASE-GSC-12636-1]</td>
<td>c 32</td>
<td>N80-28578</td>
<td></td>
</tr>
<tr>
<td>Apparatus for supplying conditioned air at a substantially constant temperature and humidity</td>
<td>[NASA-CASE-GSC-12191-1]</td>
<td>c 31</td>
<td>N80-32258</td>
<td></td>
</tr>
<tr>
<td>Belt for transmitting power to a caged driving member to a caged driven member</td>
<td>[NASA-CASE-GSC-12269-1]</td>
<td>c 37</td>
<td>N80-32717</td>
<td></td>
</tr>
<tr>
<td>System for displaying at a remote station data and for powering the remote station from the central station</td>
<td>[NASA-CASE-GSC-12141-1]</td>
<td>c 33</td>
<td>N81-14251</td>
<td></td>
</tr>
<tr>
<td>Docking station and first vehicle to a second vehicle</td>
<td>[NASA-CASE-GSC-12429-1]</td>
<td>c 37</td>
<td>N81-14320</td>
<td></td>
</tr>
<tr>
<td>Liquid metal bearings</td>
<td>[NASA-CASE-GSC-12582-1]</td>
<td>c 37</td>
<td>N81-16849</td>
<td></td>
</tr>
<tr>
<td>Safety shield for vacuum/pump chamber viewing port</td>
<td>[NASA-CASE-GSC-12513-1]</td>
<td>c 31</td>
<td>N81-19343</td>
<td></td>
</tr>
<tr>
<td>Suck boost regulator</td>
<td>[NASA-CASE-GS-C12560-1]</td>
<td>c 33</td>
<td>N81-19392</td>
<td></td>
</tr>
<tr>
<td>Fluorescent radiation converter</td>
<td>[NASA-CASE-GSC-12528-1]</td>
<td>c 74</td>
<td>N81-24900</td>
<td></td>
</tr>
<tr>
<td>Portable appliance security apparatus</td>
<td>[NASA-CASE-GSC-12559-1]</td>
<td>c 33</td>
<td>N81-25299</td>
<td></td>
</tr>
<tr>
<td>Locking mechanism for orthopaedic braces</td>
<td>[NASA-CASE-GSC-12069-1]</td>
<td>c 53</td>
<td>N81-25561</td>
<td></td>
</tr>
<tr>
<td>Method of making V-MOS field effect transistors</td>
<td>[NASA-CASE-GSC-12069-1]</td>
<td>c 33</td>
<td>N81-25661</td>
<td></td>
</tr>
<tr>
<td>Automatic thermal switch</td>
<td>[NASA-CASE-GSC-12214-1]</td>
<td>c 33</td>
<td>N81-26419</td>
<td></td>
</tr>
<tr>
<td>Linear magnetic motor/generator</td>
<td>[NASA-CASE-GSC-12518-1]</td>
<td>c 33</td>
<td>N81-24241</td>
<td></td>
</tr>
<tr>
<td>Non-contacting flow detection device</td>
<td>[NASA-CASE-GSC-12595-1]</td>
<td>c 33</td>
<td>N81-24422</td>
<td></td>
</tr>
<tr>
<td>Inorganic spark chamber frame and method of making the spark chamber frame</td>
<td>[NASA-CASE-GSC-12234-1]</td>
<td>c 35</td>
<td>N81-24471</td>
<td></td>
</tr>
<tr>
<td>Separator for alkali batteries and method of making same</td>
<td>[NASA-CASE-GSC-10350-1]</td>
<td>c 44</td>
<td>N81-24842</td>
<td></td>
</tr>
<tr>
<td>For alkali electric cells and method of making</td>
<td>[NASA-CASE-GSC-10017-1]</td>
<td>c 44</td>
<td>N81-24843</td>
<td></td>
</tr>
<tr>
<td>Variable speed drive</td>
<td>[NASA-CASE-GSC-12582-1]</td>
<td>c 37</td>
<td>N81-22750</td>
<td></td>
</tr>
<tr>
<td>Unbalance</td>
<td>[NASA-CASE-GSC-12151-1]</td>
<td>c 37</td>
<td>N81-23042</td>
<td></td>
</tr>
<tr>
<td>Time delay and integration detectors using charge storage devices</td>
<td>[NASA-CASE-GSC-12324-1]</td>
<td>c 33</td>
<td>N81-33403</td>
<td></td>
</tr>
<tr>
<td>Stirring cycle cryogenic cooler</td>
<td>[NASA-CASE-GSC-12697-1]</td>
<td>c 31</td>
<td>N82-11312</td>
<td></td>
</tr>
<tr>
<td>Scanner</td>
<td>[NASA-CASE-GSC-12022-1]</td>
<td>c 33</td>
<td>N82-13465</td>
<td></td>
</tr>
<tr>
<td>Microwave diode plate</td>
<td>[NASA-CASE-GSC-12420-1]</td>
<td>c 33</td>
<td>N82-16340</td>
<td></td>
</tr>
<tr>
<td>Laser measuring system for incremental assemblies</td>
<td>[NASA-CASE-GSC-12251-1]</td>
<td>c 36</td>
<td>N82-16596</td>
<td></td>
</tr>
<tr>
<td>Memory-based frame synchronizer</td>
<td>[NASA-CASE-GSC-12430-1]</td>
<td>c 60</td>
<td>N82-16747</td>
<td></td>
</tr>
</tbody>
</table>
NASA. Langley Research Center, Hampton, Va.

Weld velocity probing device and method Patent
(NASA-CASE-XLA-02081) c 20 N71-18281

Vibrating structure displacement measuring instrument Patent
(NASA-CASE-XLA-02135) c 32 N71-19428

Viscous-pendulum damper Patent
(NASA-CASE-XLA-01032-1) c 12 N71-15684

Leak detector Patent
(NASA-CASE-XLA-01032-1) c 12 N71-15753

Logic AND gate for flood circuits Patent
(NASA-CASE-XLA-03791) c 12 N71-18129

Controlled yielding system Patent
(NASA-CASE-XLA-08648) c 14 N71-17566

Cable arrangement for rigid tethering Patent
(NASA-CASE-XLA-03791) c 32 N71-17609

Thermal pump-compressor for space use Patent
(NASA-CASE-XLA-00377) c 33 N71-17610

Viscous pendulum damper Patent
(NASA-CASE-XLA-13074-1) c 14 N71-17626

System for conrol of free-flight rocket vehicles Patent
(NASA-CASE-XLA-00117) c 33 N71-17660

C-26

Thermal control panel Patent
(NASA-CASE-XLA-07728) c 33 N71-22980

Spacecraft aitchlock Patent
(NASA-CASE-XLA-10636) c 33 N71-22986

Stabilizing of a gravity gradient stabilized satellite Patent
(NASA-CASE-XLA-01325) c 31 N71-22989

Glass fiber laminate device Patent
(NASA-CASE-XLA-01325) c 31 N71-22993

Self-calibrating displacement transducer Patent
(NASA-CASE-XLA-00781) c 09 N71-22996

Lateral displacement system for separated rocket stages Patent
(NASA-CASE-XLA-04804) c 31 N71-23006

Thermal control coating Patent
(NASA-CASE-XLA-02096) c 18 N71-23047

Method of making an inflatable panel Patent
(NASA-CASE-XLA-01219) c 10 N71-23052

Variable duration pulse integrator Patent
(NASA-CASE-XLA-01219) c 10 N71-23084

Inertial reference system Patent
(NASA-CASE-XLA-01300) c 14 N71-23092

Micrometerodetecting penetration device Patent
(NASA-CASE-XLA-01300) c 14 N71-23249

Combined optical attitude and attitude indicating Patent
(NASA-CASE-XLA-01907) c 14 N71-23266

Solar sensor having coarse and fine sensing with method of selecting cells Patent
(NASA-CASE-XLA-01564) c 14 N71-23268

Variable compliance system Patent
(NASA-CASE-XLA-03038) c 36 N71-23255

Leading edge curvature based on convexing heat Patent
(NASA-CASE-XLA-01348) c 01 N71-23497

Method of measuring the characteristics of a gas Patent
(NASA-CASE-XLA-01348) c 23 N71-23976

Method for measuring the characteristics of a gas Patent
(NASA-CASE-XLA-03737) c 16 N71-24074

Lease grading intercomparision Patent
(NASA-CASE-XLA-04295) c 18 N71-24107

Automatic fatigue test temperature programmer Patent
(NASA-CASE-XLA-02096) c 18 N71-24276

Ring wing tension vehicle Patent
(NASA-CASE-XLA-04901) c 21 N71-24295

Process for applying black coating to metal Patent
(NASA-CASE-XLA-06198) c 15 N71-24875

Method of measuring the electron density gradients of Patent
(NASA-CASE-XLA-07473) c 15 N71-24985

Strain coupled servo control system Patent
(NASA-CASE-XLA-08650) c 22 N71-25360

Method of temperature compensating semiconductor grin Patent
(NASA-CASE-XLA-04555-1) c 14 N71-25892

Method for improving the signal-to-noise ratio of the Patent
(NASA-CASE-XLA-02810) c 21 N71-25900

Method of making pressurized panel Patent
(NASA-CASE-XLA-02892) c 12 N71-25903

Method for measuring the characteristics of a gas Patent
(NASA-CASE-XLA-02096) c 18 N71-25914

Thermal control spray system Patent
(NASA-CASE-XLA-03041) c 16 N71-25914

Ducted fan control system Patent
(NASA-CASE-XLA-02451) c 18 N71-26100

Light shield and infrared reflector for fatigue testing Patent
(NASA-CASE-XLA-07682) c 14 N71-26136

Dual resonant cavity absorption cell Patent
(NASA-CASE-LAR-10260) c 14 N71-26137

Resilience testing device Patent
(NASA-CASE-XLA-02810) c 14 N71-26137

Precipitation detector Patent
(NASA-CASE-XLA-02816) c 10 N71-26334

Instrument for measuring the dynamic behavior of liquids Patent
(NASA-CASE-XLA-08541) c 12 N71-26367

Arbitrarily shaped model survey system Patent
(NASA-CASE-XLA-04162) c 28 N71-26779

Dynamic vibration absorber Patent
(NASA-CASE-LAR-10541) c 15 N71-27006

Rate augmented digital to analog converter Patent
(NASA-CASE-XLA-07828) c 08 N71-27057

Omnidirectional microwave spacecraft antenna Patent
(NASA-CASE-XLA-00117) c 09 N71-22866

C-26

HIGH SPEED LIGHT VEHICLE CONTROL Patent
(NASA-CASE-XLA-08987) c 02 N71-27088

Suspended mass impact damper Patent
(NASA-CASE-LAR-10106-1) c 15 N71-27148

Active isolator unit for flexible bodies Patent
(NASA-CASE-LAR-10106-1) c 15 N71-27169

Soliciting device Patent
(NASA-CASE-XLA-08611) c 15 N71-27214

Finger counter for interferometers Patent
(NASA-CASE-LAR-10204) c 14 N71-27215

Widayal position switch and operability checking Patent
(NASA-CASE-XLA-08799) c 10 N71-27272

Angular displacement indicating panel bearing system Patent
(NASA-CASE-XLA-00348) c 15 N71-28740

Solid state thermal control system Patent
(NASA-CASE-LAR-10503-1) c 20 N71-29093

Specialized halogen generator for purification of water Patent
(NASA-CASE-XLA-08613) c 14 N71-29093

Optical communications system Patent
(NASA-CASE-XLA-01036) c 16 N71-29863

External data transfer on surface wave supression Patent
(NASA-CASE-LAR-10177) c 07 N71-29860

Arithmetic digital converter test circuit Patent
(NASA-CASE-LAR-00713) c 14 N71-29891

Makukpatoghraph Patent
(NASA-CASE-LAR-10452) c 14 N71-29891

Uncooperative beam Patent
(NASA-CASE-XLA-00013) c 15 N71-29898

Digital pulse width selection circuit Patent
(NASA-CASE-XLA-07791) c 09 N71-29129

Magnetically controlled plasma accelerator Patent
(NASA-CASE-XLA-00027) c 25 N71-29164

Boring bar drive mechanism Patent
(NASA-CASE-XLA-02691) c 15 N71-33518

Wind tunnel model damper Patent
(NASA-CASE-XLA-00480) c 11 N71-33612

Variable geometry rotor system Patent
(NASA-CASE-LAR-10057-1) c 02 N72-11018

Fluted tube strainer Patent
(NASA-CASE-LAR-10055-1) c 14 N72-11589

Impact measuring technique Patent
(NASA-CASE-LAR-10193) c 14 N72-16528

Sonic boom measurement Patent
(NASA-CASE-LAR-10564-1) c 08 N72-19244

Electro-mechanical analogue generator Patent
(NASA-CASE-LAR-10503-1) c 20 N72-21426

Lamé tool bit and holder for machining fiberglass materials Patent
(NASA-CASE-XLA-10470) c 15 N72-21498

Pressure operated electrical switch responsive to a pressure decrease after a pressure increase Patent
(NASA-CASE-LAR-10137-1) c 09 N72-22204

Variable geometry wind tunnels Patent
(NASA-CASE-XLA-07430) c 11 N72-22246

Magnifying scratch gauge force transducer Patent
(NASA-CASE-LAR-10486-1) c 14 N72-22457

Star image motion compensator Patent
(NASA-CASE-LAR-10523-1) c 21 N72-22444

Absolute focus lock for microscopes Patent
(NASA-CASE-LAR-10164) c 14 N72-22465

C-26

Corporation Source
Method of making semiconductor p-n junction stress specimens

Nondestructive spot test method for titanium and high temperature vacuum furnaces

Moldings for making conductors for ferroelectric memory arrays

In situ transfer standard for ultrahigh vacuum gage calibration

Parametric amplifiers with Idler circuit feedback

Variable angle tube holder

Modulation of one man lift raft

Nondestructive spot test method for magnesium and high temperature vacuum furnaces

Screened circuit capacitors

Apparatus and method for generating target mass flow

Nondestructive spot test method for ferroelectric memory arrays

Combustion detector

Infrared horizon torcher

Reefing system

Method of manufacturing an article with cavities

Electronic strain-level counter

Apparatus for inserting and removing specimens from rocket station

Automated liquid inventory collecting and dispensing system

Mold apparaturs

Automatic oscillating apparatus

Automatic focus control for facsimile cameras

Automatic control system for microphone probe

Electrooptical measurement system

Spectrometer integrated with a facsimile camera

Reagent waveguide start cell

Cable restraint

Nasa-Case-lar-10547-1 c 37 N74-30266

High field CdS detector for infrared radiation

Automatic inoculating apparatus

Instrumentation for measurement of aircraft noise and sonic boom

Objective lens for high-speed air cushioned table

Vapor phase growth of groups 3-5 compounds by resonant waveguide Stark effect

Digital controller for a Baum folding machine

Absorption laser lasing sensitivity

Apparatus for microbiological sampling

Apparatus for accommodation of large strain in lead structures

In situ transfer standard for ultrahigh vacuum gage calibration

Nondestructive spot test method for ferroelectric memory arrays

Nasa-langley research center, Hampton, Va.

Apparatus for inserting and removing specimens from rocket station
Polyvinyl alcohol battery separator containing inert filter

In a gas turbine engine control system

A multistage spent particle collector and a method for making same

Improved nickel base coating alloy

Solar energy converter using surface plasma waves

Low temperature cross linking polymers

Thrust reverser for a long duct fan engine

A high voltage v-groove solar cell

Improved thermal barrier coating system

Chemical approach for controlling nadimide cure

Active clearance control system for a turbomachine

Achromatic flake composites

Oxidation resistant slurry coating for carbon-based materials
C-39
Purge device for thrust engines Patent

North American Aviation, Inc. Torrance, CaM.
Northrop Space Line, Hawthorne, CaW.
North American Rockwell Corp, El Segundo, CaW.
North American Rockwell Corp, Downey, CaW.
North American Rockwell Corp, Canoga Park, Cam.
Northrop Nortronica, Palo Verde Penmsuto, CaW.

Bodies from thermal radiation and convective heat generating means

[NASA-CASE-XNP-00685] C 08 N71-28951

Active polymers and process for preparing the same

[NASA-CASE-XMF-00856] C 06 N71-11242

Acoustic damatic-enameled-dalloyed high molecular weight Schiff base polymers prepared in a monofunctional Schiff base Patent

[NASA-CASE-XNP-00774] C 06 N71-24749

North American Rockwell Corp., Inc., Tarrytown, N.Y.

Linear magnetic bearings

[NASA-CASE-XNP-00786] C 27 N81-18225

Impact monitoring apparatus

[NASA-CASE-MSC-12557] C 15 N78-12489

Bonding or repairing process

[NASA-CASE-MSC-12557] C 15 N75-12489

Spaceline foldable brides

[NASA-CASE-MSC-15567] C 33 N74-16819

Phase protection system for ac power lines

[NASA-CASE-MSC-15568] C 33 N74-14568

Apparatus for remote handling of materials

[NASA-CASE-MSC-15568] C 33 N74-14568

Grain analysis control in IGW arc welding

[NASA-CASE-MSC-15095] C 37 N75-10683

Helical coaxial resonator RF filter

[NASA-CASE-XNP-01328] C 26 N71-18064

Off-axis coherently pumped laser

[NASA-CASE-ARC-11241-1] C 27 N71-15673

Vapor pressure measuring system and method Patent

[NASA-CASE-XMS-01260] C 14 N71-20749

Sealing member and combination thereof and method of producing said sealing member Patent

[NASA-CASE-XMS-01263] C 15 N71-23022

Dynamic Quantum, Tarzana, Calif.

Respiratory analysis system and method

[NASA-CASE-MSC-13406-1] C 05 N73-20315

Rumination, Inc., Melbourne, Fla.

Remote platform power conserving system

[NASA-CASE-GSC-11123-1] C 15 N75-13007

Radionics Instrument Development Lab., Inc., Medison Park, II.

High speed binary to decimal conversion system Patent

[NASA-CASE-XGS-01120] C 08 N71-19544


Monopulse tracking system Patent

[NASA-CASE-XGS-01115] C 10 N71-21483

Rocket of America, Lancaster, Pa.

Bonding graphite with fused silver chloride

[NASA-CASE-XGS-00960] C 15 N69-29735

Radio Corp. of America, New York, N.Y.

Water cooled condenser for anode in carbon arc generator

[NASA-CASE-XMS-00300] C 27 N69-24296

Apparatus for balancing high frequency transistors

[NASA-CASE-XMS-00281] C 06 N69-24323

Radiation resistant silicon semiconductor devices Patent

[NASA-CASE-XNP-01145] C 09 N71-10146

PCB, Inc., Gaithersburg, Md.

Perfluorinated polynitrobenzenes containing pendant iodofluoromethyl groups


Perfluorinated polynitrobenzenes containing pendant iodofluoromethyl groups


Hydroxy terminated polyether ethers Patent

[NASA-CASE-NPO-10786] C 06 N71-27254

Polyether dimer and fluoroethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Polyether dimer and fluoroethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Hydroxy terminated polyether ethers Patent

[NASA-CASE-NPO-10786] C 06 N71-27254

Polyether dimer and fluoroethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Polyether dimer and fluoroethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers

[NASA-CASE-NPO-10786] C 06 N71-27254

Highly fluorinated polyethers
**CORPORATE SOURCE**

United Technologies Corp., Windsor Locks, Conn.

Cern-opened pitch-change apparatus

**[NASA-CASE-LEW-13000-1]**  c 07 N79-14095

United Technology Center, Sunnyvale, Calif.

Solid propellant line Patent

**[NASA-CASE-SPR-09741]**  c 27 N71-16392

University of Southern Mississippi, Hattiesburg.

Low energy electron electrometer using a monomolecular electron beam

**[NASA-CASE-LAR-12706-1]**  c 35 N84-12444

Vanderbilt Univ., Nashville, Tenn.

Solar driven liquid metal MHD power generator

**[NASA-CASE-LAR-12485-1]**  c 04 N83-25753

Vapor Corp., Chicago, Ill.

Method and apparatus for controllably heating fluid

**[NASA-CASE-XPX-04227]**  c 33 N71-18278

Vertic acid analysis

High power-high voltage wastewater Patent

**[NASA-CASE-XNP-05381]**  c 06 N79-20442

Virginia Polytechnic Inst. and State Univ., Blacksburg.

Logarithmic circuit with wide dynamic range

**[NASA-CASE-LEW-1245-1]**  c 06 N79-32259

Polyphenylpyrrolidines containing pendant phenylthethyl and ethyl groups

**[NASA-CASE-LEW-1293-1]**  c 27 N83-34040

Thermos-releathsmotic aromatic polysynthetic containing aromatic groups

**[NASA-CASE-LAR-12723-2]**  c 27 N84-27248

Usuronic transistor with Gaussian radial pressure distribution

**[NASA-CASE-LAR-12967-1]**  c 35 N84-22932

Virginia Univ., Charlottesville.

Linear semiconductor films utilizing a thermal gradient

**[NASA-CASE-XKS-04614]**  c 15 N69-21848

Wiring and connector Patent

**[NASA-CASE-LAR-10513-1]**  c 07 N72-25170

Thin film microwire

**[NASA-CASE-LAR-10511-1]**  c 09 N72-29172

Apparatus for measuring a sorbate dispersed in a fluid stream

**[NASA-CASE-ARC-10896-1]**  c 35 N79-19465

Vornado Corp., Mountain View, Calif.

Mechanical and joint system for structural column elements

**[NASA-CASE-LAR-12482-1]**  c 37 N82-32732

W

Weber Aircraft Corp., Burbank, Calif.

Articulated multiple couch assembly Patent

**[NASA-CASE-MIC-11255]**  c 05 N71-12543

Device for separating occupant from an ejection seat

**[NASA-CASE-XPX-04625]**  c 05 N71-20718

Collapsible Apollo couch

**[NASA-CASE-MIC-11340]**  c 05 N71-11085

Westinghouse Electric Corp., Baltimore, Md.

Power supply for a digital computer

**[NASA-CASE-XPX-04635]**  c 05 N71-19645

Wendland thickener

**[NASA-CASE-XPX-04674]**  c 05 N71-12960


Time delay and integration detectors using charge transfer devices

**[NASA-CASE-ARC-12324-1]**  c 33 N77-14323

Westinghouse Electric Corp., Huntersville, N.C.

Solid state television camera system Patent

**[NASA-CASE-XGS-06211]**  c 37 N89-39890


Binary code for photographic image display

**[NASA-CASE-ARC-10896-1]**  c 35 N79-19465

Wright Patterson AFB, Dayton, Ohio.

Method of controlling the movement of a device

**[NASA-CASE-MSC-14836-1]**  c 40 N80-17099

Wright Patterson AFB, Dayton, Ohio.

Method and apparatus for making a photographic image display

**[NASA-CASE-ARC-12324-1]**  c 33 N77-14323

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-MIC-18107-1]**  c 27 N81-25209

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-XGS-08684-1]**  c 27 N81-21123

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-LEW-12164-1]**  c 27 N81-21123

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-XGS-04709-1]**  c 27 N81-21123

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-LEW-12164-1]**  c 27 N81-21123

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-XGS-04709-1]**  c 27 N81-21123

Wright Patterson AFB, Dayton, Ohio.

Method of making a photographic image display

**[NASA-CASE-LEW-12164-1]**  c 27 N81-21123
CORPORATE SOURCE

Gas cooled high temperature thermocouple Patent
[NASA-CASE-XLE-09475-1] c 33 N71-1568
High resolution developing of photosensitive resists Patent
[NASA-CASE-XGS-01991] c 09 N71-21449
Pulse modulator providing fast rise and fall times Patent
[NASA-CASE-XMS-04919] c 09 N71-23270
Extended area semiconductor radiation detectors and a novel readout arrangement Patent
[NASA-CASE-XGS-02320] c 14 N71-23401
Frequency shift keying apparatus Patent
[NASA-CASE-XGS-01637] c 07 N71-23405
Phase locked phase modulator including a voltage controlled oscillator Patent
[NASA-CASE-XNP-05382] c 10 N71-23544
Bearing and gimbal lock mechanism and spiral flex lead module Patent
[NASA-CASE-XGC-10556-1] c 31 N71-26537
Multiple slope sweep generator Patent
[NASA-CASE-XMS-03542] c 09 N71-28826
Self-adjusting multisegment, deployable, natural circulation radiator Patent
[NASA-CASE-XHO-03673] c 33 N71-29046
Thermally cascaded thermoelectric generator Patent
[NASA-CASE-XNP-10753] c 03 N72-29031
Photoresistor imaging system Patent
[NASA-CASE-MFS-20669] c 23 N73-13660
Demodulator for carrier transducers Patent
[NASA-CASE-XUC-10101-1] c 33 N74-17900
Heat transfer device Patent
[NASA-CASE-XNP-11120-1] c 34 N74-18552
Amplifier stored array Patent
[NASA-CASE-XGC-11466-1] c 33 N74-20860
Glass-to-metal seals comprising relatively high expansion metals Patent
[NASA-CASE-LEW-10696-1] c 37 N74-21063
Millimeter wave pumped parametric amplifier Patent
[NASA-CASE-XGC-11617-1] c 33 N74-32660
Method of forming a wick for a heat pipe Patent
[NASA-CASE-XNP-13991-1] c 34 N79-27515
Magnifying image intensifier Patent
[NASA-CASE-GSC-12010-1] c 74 N78-18905

Sodium storage and injection system Patent
[NASA-CASE-XNP-14384-1] c 37 N80-10494
Method of producing silicon Patent
[NASA-CASE-XNP-14382-1] c 31 N80-18231
Western Instruments, Inc., College Park, Md.

Electronically resettable fuse Patent
[NASA-CASE-XGS-11177] c 09 N71-27001

Relief container Patent
[NASA-CASE-XMS-03761] c 05 N69-23192
Fluid sample collector Patent
[NASA-CASE-XMS-02767-1] c 14 N71-20435
Whittaker Corp., Los Angeles, Calif.

Polyurethanes of fluorine containing polycarbonates Patent
[NASA-CASE-MFS-10512] c 06 N73-30699
Polyurethanes from fluoroalkyl propylene carbonate polycarbonates Patent
[NASA-CASE-MFS-10509] c 06 N73-30100
Fluorinated ethers Patent
[NASA-CASE-MFS-10507] c 06 N73-30101
Highly fluorinated polymers Patent
[NASA-CASE-MFS-11499] c 06 N73-30102
Fluorine-containing polyurethane Patent
[NASA-CASE-MFS-10506] c 06 N73-30103
Fluorine-containing polyformamides Patent
[NASA-CASE-XMF-09600-1] c 27 N79-21191
Whittaker Corp., San Diego, Calif.

Reinforced polyquinoxaline gasket and method of preparing the same Patent
[NASA-CASE-MFS-21364-1] c 37 N74-18126
Polymeric foams from cross-linkable poly-s-arylenephenylimides Patent
[NASA-CASE-ARC-11008-1] c 27 N78-31322
Wisconsin Univ., Madison.

C-47
LISTINGS IN THIS INDEX ARE ARRANGED ALPHABETICALLY BY CONTRACT NUMBER. UNDER EACH CONTRACT NUMBER, THE ACCESION NUMBERS DENOTING DOCUMENTS THAT HAVE BEEN PRODUCED AS A RESULT OF RESEARCH DONE UNDER THAT CONTRACT ARE ARRANGED IN ASCENDING ACCESION NUMBER ORDER.

The subject category number indicates the category in Section 1 (Abstracts) in which the citation is located.
<table>
<thead>
<tr>
<th>REPORT NUMBER INDEX</th>
<th>REPORT NUMBER INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>US-PATENT-3,621,520</td>
<td>US-PATENT-3,621,520</td>
</tr>
<tr>
<td>US-PATENT-3,621,530</td>
<td>US-PATENT-3,621,530</td>
</tr>
<tr>
<td>US-PATENT-3,622,381</td>
<td>US-PATENT-3,622,381</td>
</tr>
<tr>
<td>REPORT NUMBER INDEX</td>
<td>US-PATENT-4,475,385</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>US-PATENT-4,449,400</td>
<td>47</td>
</tr>
<tr>
<td>US-PATENT-4,449,514</td>
<td>44</td>
</tr>
<tr>
<td>US-PATENT-4,449,594</td>
<td>37</td>
</tr>
<tr>
<td>US-PATENT-4,450,269</td>
<td>27</td>
</tr>
<tr>
<td>US-PATENT-4,450,447</td>
<td>32</td>
</tr>
<tr>
<td>US-PATENT-4,451,017</td>
<td>18</td>
</tr>
<tr>
<td>US-PATENT-4,451,496</td>
<td>26</td>
</tr>
<tr>
<td>US-PATENT-4,452,088</td>
<td>24</td>
</tr>
<tr>
<td>US-PATENT-4,452,412</td>
<td>16</td>
</tr>
<tr>
<td>US-PATENT-4,452,163</td>
<td>06</td>
</tr>
<tr>
<td>US-PATENT-4,454,811</td>
<td>54</td>
</tr>
<tr>
<td>US-PATENT-4,454,849</td>
<td>44</td>
</tr>
<tr>
<td>US-PATENT-4,454,753</td>
<td>09</td>
</tr>
<tr>
<td>US-PATENT-4,455,413</td>
<td>27</td>
</tr>
<tr>
<td>US-PATENT-4,455,532</td>
<td>72</td>
</tr>
<tr>
<td>US-PATENT-4,455,640</td>
<td>32</td>
</tr>
<tr>
<td>US-PATENT-4,456,208</td>
<td>27</td>
</tr>
<tr>
<td>US-PATENT-4,456,709</td>
<td>51</td>
</tr>
<tr>
<td>US-PATENT-4,458,418</td>
<td>37</td>
</tr>
<tr>
<td>US-PATENT-4,458,554</td>
<td>37</td>
</tr>
<tr>
<td>US-PATENT-4,459,083</td>
<td>02</td>
</tr>
<tr>
<td>US-PATENT-4,459,470</td>
<td>27</td>
</tr>
<tr>
<td>US-PATENT-4,459,529</td>
<td>33</td>
</tr>
<tr>
<td>US-PATENT-4,459,562</td>
<td>33</td>
</tr>
<tr>
<td>US-PATENT-4,462,671</td>
<td>76</td>
</tr>
<tr>
<td>US-PATENT-4,463,465</td>
<td>03</td>
</tr>
<tr>
<td>US-PATENT-4,464,710</td>
<td>33</td>
</tr>
<tr>
<td>US-PATENT-4,466,867</td>
<td>35</td>
</tr>
<tr>
<td>US-PATENT-4,468,502</td>
<td>76</td>
</tr>
<tr>
<td>US-PATENT-4,469,942</td>
<td>35</td>
</tr>
<tr>
<td>US-PATENT-4,470,293</td>
<td>37</td>
</tr>
<tr>
<td>US-PATENT-4,470,403</td>
<td>44</td>
</tr>
<tr>
<td>US-PATENT-4,471,357</td>
<td>32</td>
</tr>
<tr>
<td>US-PATENT-4,472,473</td>
<td>18</td>
</tr>
<tr>
<td>US-PATENT-4,472,716</td>
<td>35</td>
</tr>
<tr>
<td>US-PATENT-4,472,728</td>
<td>35</td>
</tr>
<tr>
<td>US-PATENT-4,473,674</td>
<td>24</td>
</tr>
<tr>
<td>US-PATENT-4,473,762</td>
<td>33</td>
</tr>
<tr>
<td>US-PATENT-4,474,062</td>
<td>06</td>
</tr>
<tr>
<td>US-PATENT-4,474,180</td>
<td>52</td>
</tr>
<tr>
<td>US-PATENT-4,474,411</td>
<td>35</td>
</tr>
<tr>
<td>US-PATENT-4,475,365</td>
<td>09</td>
</tr>
<tr>
<td>Accession Number</td>
<td>NASA Document Symbol</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>

Listings in the index are arranged numerically by NASA accession number. The category number indicates the category in Section 1 (Abstracts) in which the citation is located. The accession number denotes the item number by which the item is identified within the subject category. An asterisk (*) indicates that the item is a NASA report. A pound sign (#) indicates that the item is available on microfiche.
<table>
<thead>
<tr>
<th>Accession Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N75-12618*</td>
<td>c 54</td>
</tr>
<tr>
<td>N75-12732*</td>
<td>c 74</td>
</tr>
<tr>
<td>N75-12810*</td>
<td>c 76</td>
</tr>
<tr>
<td>N75-12910*</td>
<td>c 05</td>
</tr>
<tr>
<td>N75-12906*</td>
<td>c 09</td>
</tr>
<tr>
<td>N75-12909*</td>
<td>c 09</td>
</tr>
<tr>
<td>N75-13007*</td>
<td>c 15</td>
</tr>
<tr>
<td>N75-13002*</td>
<td>c 24</td>
</tr>
<tr>
<td>N75-13139*</td>
<td>c 33</td>
</tr>
<tr>
<td>N75-13206*</td>
<td>c 37</td>
</tr>
<tr>
<td>N75-13205*</td>
<td>c 37</td>
</tr>
<tr>
<td>N75-13206*</td>
<td>c 37</td>
</tr>
<tr>
<td>N75-13502*</td>
<td>c 51</td>
</tr>
</tbody>
</table>

**N75-15932** | c 35 |

---

**N75-19520**
<table>
<thead>
<tr>
<th>Accession Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N76-14931* # 75</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-14932* # 75</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-1510* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15260* # 23</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15261* # 23</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15300* # 33</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15301* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15303* # 33</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15306* # 33</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15307* # 33</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15311* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15314* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15316* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15318* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15319* # 32</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15329* # 32</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15330* # 32</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15339* # 32</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15420* # 25</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15431* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15432* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15435* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15450* # 35</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15507* # 75</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15508* # 75</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15509* # 75</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15510* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15511* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15512* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15514* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15517* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
<tr>
<td>N76-15518* # 27</td>
<td>NASA CASE ARC-10714-1</td>
</tr>
</tbody>
</table>

**Notes:**
- The list includes accession numbers and their descriptions.
- The numbers and descriptions are concise and likely represent records or entries in a database or catalog.

**F-45**
<table>
<thead>
<tr>
<th>Accession Number Index</th>
<th>Description</th>
<th>Patent Number</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCESSION NUMBER INDEX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32373</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LAR-12466-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-130527</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-244-1181</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-244-1375</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-246-1279</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32417</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NPO-14399-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-264097</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-264-1922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-313-109</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-313-107</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-313-385</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-346-424</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LEW-1313-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-248772</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-68R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-350-374</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-432-220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-432-222</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-55-204</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32963</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LEW-15951-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-195228</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-350-170</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-350-296</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-350-410</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-434-218</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32841</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-ARC-1177-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-415878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-425-204</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32352</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NPO-15951-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-437913</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-457912</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-457912</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32437</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LEW-1279-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-431421</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-251-98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-437-197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-479-197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-479-197</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LAR-1309-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-218588</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-192E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-369</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-287</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33529</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 27</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-ARC-1406-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-403371</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-403371</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33957</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 32</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NPO-15920-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-456705</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-244-159</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-244-136</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NPO-35670-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-409070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-409070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33681</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-ARC-1581-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-403494</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-403494</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33996</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NPO-1458-25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-149529</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-149529</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33334</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LAR-1309-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-218588</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-192E</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-369</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-204-287</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-33177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NPO-1581-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-43217</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-43217</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-32106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LEW-1309-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-264097</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-264-1922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-313-109</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-313-107</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-313-385</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-346-424</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-13172</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-ARC-1783-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-266254</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-244-159</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-244-136</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-13818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-NEP-1458-25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-149529</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-149529</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N82-13818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c 25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA-CASE-LEW-1595-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-224311</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-274-122</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-274-123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-73-170R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-PATENT-CLASS-73-170R</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**F-72**
<table>
<thead>
<tr>
<th>ACCESSION NUMBER INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>N84-24807 # c 27</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-540327</td>
</tr>
<tr>
<td>N84-24800 # c 31</td>
</tr>
<tr>
<td>NASA-CASE-NPO-16257-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-588164</td>
</tr>
<tr>
<td>N84-25015 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11510-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-600204</td>
</tr>
<tr>
<td>N84-25016 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-LEW-12758-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-604244</td>
</tr>
<tr>
<td>N84-25074 # c 36</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11651-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-588163</td>
</tr>
<tr>
<td>N84-25083 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-LAR-12169-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-604331</td>
</tr>
<tr>
<td>N84-25184 # c 44</td>
</tr>
<tr>
<td>NASA-CASE-NPO-16236-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-592495</td>
</tr>
<tr>
<td>N84-25306 # c 60</td>
</tr>
<tr>
<td>NASA-CASE-NPO-16116-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-602105</td>
</tr>
<tr>
<td>N84-25431 # c 72</td>
</tr>
<tr>
<td>NASA-CASE-ARC-12797-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-602105</td>
</tr>
<tr>
<td>N84-25450 # c 74</td>
</tr>
<tr>
<td>NASA-CASE-GSC-12897-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-592493</td>
</tr>
<tr>
<td>N84-26400 # c 74</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11502-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-594134</td>
</tr>
<tr>
<td>N84-27713 # c 04</td>
</tr>
<tr>
<td>NASA-CASE-ARC-14155-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27732 # c 06</td>
</tr>
<tr>
<td>NASA-CASE-ARC-14156-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27786 # c 16</td>
</tr>
<tr>
<td>NASA-CASE-ARC-14176-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27787 # c 18</td>
</tr>
<tr>
<td>NASA-CASE-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27829 # c 24</td>
</tr>
<tr>
<td>NASA-CASE-LEW-12756-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-141839</td>
</tr>
<tr>
<td>N84-27855 # c 26</td>
</tr>
<tr>
<td>NASA-CASE-LEW-13036-2</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27860 # c 28</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11455-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-14580</td>
</tr>
<tr>
<td>N84-27864 # c 27</td>
</tr>
<tr>
<td>NASA-CASE-LEW-13775-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27865 # c 27</td>
</tr>
<tr>
<td>NASA-CASE-LEW-12830-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27884 # c 27</td>
</tr>
<tr>
<td>NASA-CASE-APPL-SN-14580</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27885 # c 27</td>
</tr>
<tr>
<td>NASA-CASE-APPL-SN-14580</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27888 # c 27</td>
</tr>
<tr>
<td>NASA-CASE-APPL-SN-14580</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-27960 # c 32</td>
</tr>
<tr>
<td>NASA-CASE-NPO-15204-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-27969 # c 32</td>
</tr>
<tr>
<td>NASA-CASE-ARC-12311-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-27965 # c 32</td>
</tr>
<tr>
<td>NASA-CASE-ARC-17489-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28015 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11651-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-28016 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11651-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28017 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11651-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28019 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11651-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28020 # c 35</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11651-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28021 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-ARC-11597-2</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28032 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-ARC-12781-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-28033 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-ARC-17262-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-5901</td>
</tr>
<tr>
<td>N84-28034 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-ARC-12821-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-28035 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-LAR-12765-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-28084 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-LAR-12644-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-28085 # c 37</td>
</tr>
<tr>
<td>NASA-CASE-ARC-12765-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-584287</td>
</tr>
<tr>
<td>N84-28203 # c 44</td>
</tr>
<tr>
<td>NASA-CASE-NPO-15388-1</td>
</tr>
<tr>
<td>US-PATENT-APPL-SN-592493</td>
</tr>
<tr>
<td>N84-28290 # c 74</td>
</tr>
<tr>
<td>NASA-CASE-NPO-15805-1</td>
</tr>
</tbody>
</table>

**F-79**
A subject index is provided for over 4300 patents and patent applications for the period May 1969 through December 1984. Additional indexes list personal authors, corporate authors, contract numbers, NASA case numbers, U.S. patent class numbers, U.S. patent numbers, and NASA accession numbers.
**FEDERAL DEPOSITORY LIBRARY PROGRAM**

The Federal Depository Library Program provides Government publications to designated libraries throughout the United States. The Regional Depository Libraries listed below receive and retain at least one copy of nearly every Federal Government publication, either in printed or microfilm form, for use by the general public. These libraries provide reference services and inter-library loans; however, they are not sales outlets. You may wish to ask your local library to contact a Regional Depository to help you locate specific publications, or you may contact the Regional Depository yourself.

<table>
<thead>
<tr>
<th>Library Name</th>
<th>Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ARKANSAS STATE LIBRARY</strong></td>
<td>One Capitol Mall, Little Rock, AR 72201</td>
<td>(501) 371-2326</td>
</tr>
<tr>
<td><strong>AUSTRALIA LIBRARY</strong></td>
<td>1357 Broadway, Tucson, AZ 85721</td>
<td>(602) 626-5233</td>
</tr>
<tr>
<td><strong>CALIFORNIA STATE LIBRARY</strong></td>
<td>318 Capitol Avenue, Sacramento, CA 95810</td>
<td>(916) 322-4572</td>
</tr>
<tr>
<td><strong>COLORADO LIBRARY</strong></td>
<td>1223 15th St, Boulder, CO 80303</td>
<td>(303) 492-8834</td>
</tr>
<tr>
<td><strong>CONNECTICUT STATE LIBRARY</strong></td>
<td>1517 Main St, Middletown, CT 06457</td>
<td>(860) 347-2527</td>
</tr>
<tr>
<td><strong>GEORGIA LIBRARY</strong></td>
<td>300 State Capitol Bldg, Atlanta, GA 30334</td>
<td>(404) 656-0001</td>
</tr>
<tr>
<td><strong>HAWAII LIBRARY</strong></td>
<td>3050 King Kamehameha Ave, Honolulu, HI 96815</td>
<td>(808) 944-1171</td>
</tr>
<tr>
<td><strong>IDAHO LIBRARY</strong></td>
<td>1200 N Capitol Blvd, Boise, ID 83702</td>
<td>(208) 334-2100</td>
</tr>
<tr>
<td><strong>ILLINOIS STATE LIBRARY</strong></td>
<td>512 S Dearborn St, Chicago, IL 60604</td>
<td>(312) 454-1000</td>
</tr>
<tr>
<td><strong>ILLINOIS TECHNICAL UNIV. LIBRARY</strong></td>
<td>100 400 W. Madison St, Chicago, IL 60607</td>
<td>(312) 263-7150</td>
</tr>
<tr>
<td><strong>INDIANA STATE LIBRARY</strong></td>
<td>800 W. 4th St, Indianápolis, IN 46204</td>
<td>(317) 232-3686</td>
</tr>
<tr>
<td><strong>UNIVERSITY OF IOWA LIBRARY</strong></td>
<td>101 Bousfield Hall, Iowa City, IA 52242</td>
<td>(319) 353-3318</td>
</tr>
<tr>
<td><strong>LOUISIANA STATE UNIVERSITY</strong></td>
<td>1300 University Ave, Baton Rouge, LA 70803</td>
<td>(504) 528-8300</td>
</tr>
<tr>
<td><strong>LOUISIANA TECHNICAL UNIV. LIBRARY</strong></td>
<td>200 W. 4th St, Baton Rouge, LA 70803</td>
<td>(504) 528-8300</td>
</tr>
<tr>
<td><strong>MASSACHUSETTS TECHNICAL UNIV. LIBRARY</strong></td>
<td>500 Boylston St, Boston, MA 02116</td>
<td>(617) 266-1636</td>
</tr>
<tr>
<td><strong>MARYLAND LIBRARY</strong></td>
<td>2200 University Blvd, College Park, MD 20740</td>
<td>(301) 454-3034</td>
</tr>
<tr>
<td><strong>BOSTON PUBLIC LIBRARY</strong></td>
<td>Government Docs. Dept, Boston, MA 02117</td>
<td>(617) 565-7000</td>
</tr>
<tr>
<td><strong>DETROIT PUBLIC LIBRARY</strong></td>
<td>5201 Woodward Ave, Detroit, MI 48202</td>
<td>(313) 875-3636</td>
</tr>
<tr>
<td><strong>MICHIGAN STATE LIBRARY</strong></td>
<td>1200 W. Bagg St, Lansing, MI 48909</td>
<td>(517) 337-1200</td>
</tr>
<tr>
<td><strong>UNIVERSITY OF MARYLAND</strong></td>
<td>McKelding Lib.—Doc. Div, College Park, MD 20742</td>
<td>(301) 454-3034</td>
</tr>
<tr>
<td><strong>NEW YORK STATE LIBRARY</strong></td>
<td>Empire State Plaza, Albany, NY 12240</td>
<td>(518) 474-5663</td>
</tr>
<tr>
<td><strong>UNIVERSITY OF NORTH CAROLINA</strong></td>
<td>101 College Rd, Wilson Library, Chapel Hill, NC 27515</td>
<td>(919) 962-1321</td>
</tr>
<tr>
<td><strong>UNIVERSITY OF MISSISSIPPI LIB.</strong></td>
<td>1790 University Ave, University Park, MS 38677</td>
<td>(662) 325-5857</td>
</tr>
<tr>
<td><strong>UNIVERSITY OF MONTANA</strong></td>
<td>400 Tenth Ave, Missoula, MT 59801</td>
<td>(406) 243-6700</td>
</tr>
<tr>
<td><strong>NEBRASKA LIBRARY</strong></td>
<td>One Capitol Mall, Lincoln, NE 68508</td>
<td>(402) 471-2045</td>
</tr>
<tr>
<td><strong>NEW MEXICO STATE LIBRARY</strong></td>
<td>Reference Section, Santa Fe, NM 87501</td>
<td>(505) 827-2033</td>
</tr>
<tr>
<td><strong>NEW YORK STATE LIBRARY</strong></td>
<td>Empire State Plaza, Albany, NY 12220</td>
<td>(518) 474-5663</td>
</tr>
<tr>
<td><strong>OKLAHOMA DEPT. OF LIB.</strong></td>
<td>1200 NE 18th St, Oklahoma City, OK 73105</td>
<td>(405) 222-2002</td>
</tr>
<tr>
<td><strong>OKLAHOMA STATE UNIV. LIB.</strong></td>
<td>Documents Loop, University Campus, Oklahoma City, OK 73105</td>
<td>(405) 222-2002</td>
</tr>
<tr>
<td><strong>PORTLAND STATE UNIV. LIB.</strong></td>
<td>1600 SW Fifth Ave, Portland, OR 97201</td>
<td>(503) 229-2503</td>
</tr>
<tr>
<td><strong>TEXAS STATE LIBRARY</strong></td>
<td>100 Congress Ave, Austin, TX 78701</td>
<td>(512) 471-2996</td>
</tr>
<tr>
<td><strong>UTAH STATE UNIVERSITY</strong></td>
<td>150 N. 1900 East, Salt Lake City, UT 84122</td>
<td>(801) 538-6800</td>
</tr>
<tr>
<td><strong>WASHINGTON STATE LIBRARY</strong></td>
<td>1111 4th Av, Seattle, WA 98104</td>
<td>(206) 684-5900</td>
</tr>
<tr>
<td><strong>WEST VIRGINIA LIB.</strong></td>
<td>100 W. Virginia Ave, Morgantown, WV 26505</td>
<td>(304) 293-1300</td>
</tr>
<tr>
<td><strong>WYOMING STATE LIBRARY</strong></td>
<td>5400 University Ave, Cheyenne, WY 82002</td>
<td>(307) 777-6344</td>
</tr>
</tbody>
</table>