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FACILITY FORM 602

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National Aeronautics and Space Administration



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Patent No.	Date	Title	Patent No.	Date	Title
2,837,706	6-3-58	Line Following Servosystem	3,049,876	8-21-62	Annular Rocket Motor and Nozzle Configuration
2,898,889	8-11-59	Mechanically-Limited Electrically Operated Hydraulic Valve System for Aircraft Controls	3,053,484	9-11-62	Variable Sweep Wing Configuration
2,903,307	9-8-59	Two Component Bearing	3,057,597	10-9-62	Modification and Improvements to Cooled Blades
2,926,123	2-23-60	Temperature Reducing Coating for Metals Subject to Flame Exposure	3,059,220	10-16-62	Apparatus for Coupling a Plurality of Ungrounded Circuits to a Gounded Circuit
2,934,331	4-26-60	Apparatus for Making a Metal Slurry Product	3,063,291	11-13-62	High Vacuum Condenser Tank for Ion Rocket Engines
2,940,259	6-14-60	Rocket Propellant Injector	3,064,928	11-20-62	Variable Sweep Wing Aircraft
2,944,316	7-12-60	Process of Casting Heavy Slips	3,067,573	12-11-62	Telescoping-Spike Supersonic Inlet for Aircraft Engines
2,945,667	7-19-60	Flexible Seal for Valves	3,068,658	12-18-62	Venting Vapor Apparatus
2,956,772	10-18-60	Liquid-Spray Cooling Method	3,069,123	12-18-62	Instrument Support with Precise Lateral Adjustment
2,971,837	2-14-61	High Temperature Nickel-Base Alloy	3,070,330	12-25-62	Attitude and Propellant Flow Control System and Method
2,971,838	2-14-61	High Temperature Nickel-Base Alloy	3,070,349	12-25-62	Multistage Multiple-Reentry Turbine
2,974,925	3-14-61	External Liquid-Spray Cooling of Turbine Blades	3,070,407	12-25-62	Air Bearing
2,984,735	5-14-61	Runway Light	3,072,574	1-8-63	Gas Lubricant Compositions
2,991,671	7-1-61	Wire Grid Forming Apparatus	3,076,065	1-29-63	High-Speed Low-Level Electrical Stepping Switch
2,991,961	7-11-61	Jet Aircraft Configuration	3,077,599	2-12-63	Collapsible Loop Antenna for Space Vehicle
2,996,212	8-15-61	Self Supporting Space Vehicle	3,079,113	2-26-63	Vehicle Parachute and Equipment Jettison System
2,997,274	8-22-61	Turbo-Machine Blade Vibration Damper	3,080,711	3-12-63	Penshape Exhaust Nozzle for Supersonic Engine
3,001,363	9-26-61	Spherical Solid-Propellant Rocket Motor	3,083,611	4-2-63	Multi-Lobar SCAN Horizon Sensor
3,001,395	9-26-61	Air Frame Drag Balance	3,084,421	4-9-63	Reinforced Metallic Composites
3,001,739	9-26-61	Aerial Capsule Emergency Separation Device	3,085,165	4-9-63	Ultra-Long Monostable Multivibrator Employing Bistable Semiconductor Switch to Allow Charging or Timing Circuit
3,004,735	10-17-61	Particle Detection Apparatus	3,087,692	4-30-63	Variable-Span Aircraft
3,005,081	10-17-61	High Intensity Heat and Light Unit	3,088,441	5-7-63	Valve Actuator
3,005,339	10-24-61	Wind Tunnel Airstream Oscillating Apparatus	**3,090,212	5-21-63	Sandwich Panel Construction
3,008,229	11-14-61	Process for Applying a Protective Coating for Salt Bath Brazing	3,090,580	5-21-63	Space and Atmospheric Reentry Vehicle
3,010,372	11-28-61	Folding Apparatus	3,093,000	6-11-63	Check Valve Assembly for a Probe
3,011,760	12-5-61	Transportation Cooled Turbine Blade Manufactured from Wires	3,093,346	6-11-63	Space Capsule
3,012,400	12-21-61	Nozzle	3,098,630	7-23-63	Annular Supersonic Decelerator or Drogue
3,012,407	12-21-61	Insulating Structure	**3,100,294	8-6-63	Time-Division Multiplexer
3,016,693	1-16-62	Electro-Thermal Rocket	3,100,990	8-20-63	Two-Plane Balance
3,016,863	1-16-62	Hydrofoil	3,102,948	9-3-63	Electric Arc Welding
3,022,672	2-27-62	Differential Pressure Cell	3,104,079	9-17-63	Variable-Geometry Winged Reentry Vehicle
3,024,659	3-13-62	Magnetically Centered Liquid Column Float	**3,104,082	9-17-63	Variable Sweep Aircraft Wing
3,028,122	4-3-62	Landing Arrangement for Aerial Vehicles	3,105,515	10-1-63	Pressure Regulating System
3,028,126	4-3-62	Three Axis Controller	**3,106,603	10-8-63	High Voltage Cable
3,028,128	4-3-62	Reentry Vehicle Leading Edge	3,108,171	10-22-63	Radiant Heater Having Formed Filaments
3,038,077	6-5-62	Infrared Scanner			
3,038,175	6-12-62	Survival Couch			
3,041,587	6-26-62	Angular Measurement System			
3,041,924	7-3-62	Motion Picture Camera for Optical Pyrometry			
3,045,424	7-24-62	Method for Continuous Variation of Propellant Flow and Thrust in Propulsive Devices			

Patent No.	Date	Title
3,110,318	11-12-63	Slosh Suppressing Device and Method
3,112,672	12-3-63	Umbilical Separator for Rockets
3,115,630	12-24-63	Reflector Space Satellite
3,118,100	1-14-64	Electric Battery and Method of Operating the Same
3,119,232	1-28-64	Rocket Engine
3,120,101	2-4-64	Channel Type Shell Construction for Rocket Engine and the Like
3,120,361	2-4-64	Landing Arrangement for Aerospace Vehicle
3,120,738	2-11-64	Ignition System for Monopropellant Combustion Devices
3,121,309	2-18-64	Spherically Shaped Rocket Motor
3,122,000	2-25-64	Apparatus for Transferring Cryogenic Liquids
3,122,098	2-25-64	Apparatus and Method for Control of a Solid Fueled Rocket Vehicle
3,122,885	3-3-64	Injector for Bipropellant Rocket Engines
3,123,248	3-3-64	Expulsion Bladder Equipped Storage Tank Structure
**3,127,157	3-31-64	Multiple Belleville Spring Assembly
3,128,389	4-7-64	Variable Frequency Magnetic Multivibrator
3,128,845	4-14-64	Deepin Weight Release
3,130,940	4-28-64	Heat Shield
3,132,342	5-5-64	Antenna System Using Parasitic Elements and Two Driven Elements at 90° Angle Fed 180° Out of Phase
3,132,476	5-12-64	Thrust Vector Control Apparatus
3,132,479	5-12-64	Universal Restrainer and Joint
**3,132,903	5-12-64	Slit Regulated Gas Journal Bearing
3,135,089	6-2-64	Decomposition Unit
3,135,090	6-2-64	Rocket Motor System
3,136,123	6-9-64	Rocket Engine Injector
3,138,837	6-30-64	Method of Making Fiber Reinforced Metallic Composites
3,139,725	7-7-64	Steerable Solid Propellant Rocket Motor
**3,140,728	7-14-64	High Pressure Four-Way Valve
3,141,340	7-21-64	Gravity Device
3,141,769	7-21-64	Method of Producing Porous Tungsten Ionizers for Ion Rocket Engines
3,141,932	7-21-64	Switching Mechanism with Energy Storage Means
**3,143,321	8-4-64	Frangible Tube Energy Dissipation
3,143,651	8-4-64	X-Ray Reflection Collimator Adapted For Focus X-Radiation Directly On A Detector
3,144,219	8-11-64	Manned Space Station
3,144,999	8-18-64	Propellant Blade Loading Control
3,145,874	8-18-64	Means For Controlling Rupture Of Shock Tube Diaphragms
3,147,422	9-1-64	Electronic Motor Control System
3,149,897	9-22-64	Printed Cable Connector
3,150,329	9-22-64	Variable Frequency Magnetic Coupled Multivibrator
**3,150,387	9-29-64	Foam Generator
*3,152,344	10-13-64	Life Preserver
3,155,992	11-10-64	Life Raft
3,156,090	11-10-64	Ion Rocket
3,157,529	11-17-64	Bonded Solid Lubricant Coating
3,158,172	11-24-64	High-Temperature, High-Pressure Spherical Segment Valve
3,158,336	11-24-64	Assembly for Recovering a Capsule
**3,158,764	11-24-64	Two-Fluid Magneto-hydrodynamic System and Method for Thermal-Electric Power Conversion
3,159,967	12-8-64	Variable Thrust Ion Engine Utilizing Thermally Decomposable Solid Fuel
**3,160,825	12-8-64	Temperature Compensating Means for Cavity Resonator of Amplifier

Patent No.	Date	Title
**3,160,950	12-15-64	Method and Apparatus for Shock Protection
3,162,012	12-22-64	Formed Metal Ribbon Wrap
**3,163,935	1-5-65	Mechanical Coordinate Converter
3,164,222	1-5-65	Non-Reusable Kinetic Energy Absorber
3,164,369	1-5-65	Multiple Reentry Turbine
3,165,356	1-12-65	Shock Absorbing Support and Restraint Means
3,166,834	1-26-65	Catalyst Bed Removing Tool
3,167,426	1-26-65	Nickel-Base Alloy
3,168,827	2-9-65	Airplane Take-off Performance Indicator
*3,169,001	2-9-65	Aircraft Wheel Spray Drag Alleviator
**3,169,613	2-16-65	Elastic Universal Joint
**3,169,725	2-16-65	Erectable Modular Space Station
3,170,286	2-23-65	Injector Valve Device
3,170,290	2-23-65	Liquid Rocket System
3,170,295	2-23-65	Propellant Tank Pressurization System
3,170,324	2-23-65	Aerodynamic Measuring Device
**3,170,471	2-23-65	Inflatable Honeycomb
3,170,486	2-23-65	Two-Component Valve Assembly
3,170,605	2-23-65	Ejection Valve
3,170,657	2-23-65	Landing Arrangement for Aerial Vehicle
3,170,660	2-23-65	Parachute Glider
3,170,773	2-23-65	Reinforced Metallic Composites
3,171,060	2-23-65	Plasma Accelerator
3,171,081	2-23-65	Ionization Vacuum Gauge
3,172,097	3-2-65	Binary to Binary-Coded-Decimal Converter
3,173,246	3-16-65	Colloid Propulsion Method and Apparatus
3,173,251	3-16-65	Apparatus for Igniting Solid Propellants
3,174,278	3-23-65	Continuously Operating Induction Plasma Rocket Thrust Chamber
3,174,279	3-23-65	Production of High Purity Silicon Carbide
3,174,827	3-23-65	Production of High Purity Silicon Carbide
3,175,789	3-30-65	Landing Pad Assembly for Aerospace Vehicles
3,176,222	3-30-65	Apparatus Having Coaxial Capacitor Structure for Measuring Fluid Density
3,176,499	4-6-65	High Temperature Testing Apparatus
3,176,933	4-6-65	Thermal Control of Space Vehicles
*3,177,933	4-13-65	Thermal Switch
3,178,883	4-20-65	Attitude Control for Spacecraft
3,180,264	4-27-65	Coupling for Linear Shaped Charge
3,180,587	4-27-65	Attitude Orientation of Spin-Stabilized Space Vehicles
3,181,821	5-4-65	Spacecraft Soft Landing System
3,182,496	5-11-65	Electric Arc Driven Wind Tunnel
3,183,506	5-11-65	Radar Ranging Receiver
3,185,023	5-25-65	Optical Inspection Apparatus
3,187,583	6-8-65	Space Simulator
3,188,472	6-8-65	Method and Apparatus for Determining Satellite Orientation Utilizing Spatial Energy Sources
3,188,844	6-15-65	Electrical Discharge Apparatus for Forming
3,189,299	6-15-65	Dynamic Precession Damper for Spin Stabilized Vehicles
**3,189,535	6-15-65	Means and Method of Depositing Thin Films on Substrates
3,189,726	6-15-65	High Temperature Heat Source
3,189,794	6-15-65	Relay Binary Circuit
3,189,864	6-15-65	Electrical Connector for Flat Cables
3,191,316	6-29-65	Lunar Landing Flight Research Vehicle
3,191,379	6-29-65	Propellant Grain for Rocket Motors

<u>Pat. No.</u>	<u>Date</u>	<u>Title</u>
3,191,907	6-29-65	Conical Valve Plug
3,192,730	7-6-65	Helium Refining by Superfluidity
3,193,883	7-13-65	Mandrel for Shaping Solid Propellant Rocket Fuel into a Motor Casing
3,194,060	7-13-65	Seismic Displacement Transducer
3,194,525	7-13-65	Supporting and Protecting Device
3,194,951	7-13-65	Logarithmic Converter
3,196,261	7-20-65	Full Binary Adder
3,196,362	7-20-65	Temperature Compensated Solid State Differential
3,196,557	7-27-65	Centrifuge Mounted Motion Simulator
3,196,558	7-27-65	Means for Visually Indicating Flight Paths of Vehicles Between the Earth
3,196,598	7-27-65	Inlet Deflector for Jet Engines
3,196,675	7-27-65	Optical Torquemeter
3,196,690	7-27-65	Impact Simulator
3,197,616	7-27-65	Temperature Regulation Circuit
3,198,955	8-3-65	Binary Magnetic Memory Device
3,199,340	8-10-65	Accelerometer with F.M. Output
3,199,343	8-10-65	Electric Propulsion Engine Test Chamber
3,199,931	8-10-65	Externally Pressurized Fluid Bearing
3,200,706	8-17-65	Gas Actuated Bolt Disconnect
3,201,560	8-17-65	Electric-Arc Heater
3,201,635	8-17-65	Method and Apparatus for Producing a Plasma
3,201,980	8-24-65	Thrust Dynamometer
3,202,381	8-24-65	Recoverable Rocket Vehicle
3,202,398	8-24-65	Locking Device for Turbine Rotor Blades
3,202,844	8-24-65	Energy Conversion Apparatus
3,202,915	8-24-65	Particle Beam Measurement Apparatus Using Beam Kinetic Energy to Change the Heat Sensitive Resistance of the Detection Probe
**3,202,998	8-24-65	Flexible Foam Erectable Space Structure
3,204,447	9-7-65	Enthalpy and Stagnation Temperature Determination of a High Temperature Laminar Flow Gas Stream
3,204,889	9-7-65	Space Vehicle Electrical System
3,205,361	9-7-65	Light Sensitive Digital Aspect Sensor
3,205,362	9-7-65	Photosensitive Device to Detect Bearing Deviation
3,205,381	9-7-65	Ionospheric Battery
3,206,141	9-14-65	Space Vehicle Attitude Control
3,208,215	9-28-65	Gimbaled, Partially Submerged Rocket Nozzle
3,208,272	9-28-65	Surface Roughness Detector
3,208,694	9-28-65	Nose Gear Steering System for Vehicle with Main Skid
3,208,707	9-28-65	Pivotal Shock Absorbing Pad Assembly
3,209,360	9-28-65	Antenna Beam-Shaping Apparatus
3,209,361	9-28-65	Cassegrainian Antenna Subreflector Flange for Suppressing Ground Noise
3,210,927	10-12-65	Electro-Thermal Rockets Having Improved Heat Exchangers
3,211,169	10-12-65	Shrink-fit Gas Valve
3,211,414	10-12-65	Thermally Operated Valve
3,212,096	10-12-65	Parabolic Reflector Horn Feed With Spillover Correction
3,212,259	10-15-65	Tertiary Flow Injection Thrust Vectoring System
3,212,325	10-12-65	Force Measuring Instrument
3,212,564	10-19-65	Heat Conductive Resiliently Compressible Structure for Space Electronic Package Modules
3,215,572	11-02-65	Low Viscosity Magnetic Fluid Obtained by the Colloidal Suspension of Magnetic Particles
*3,215,842	11-02-65	Optical Communication System
3,216,007	11-02-65	Analog-to-Digital Conversion System
**3,217,624	11-16-65	Electrically-operated Rotary Shutter
3,218,479	11-16-65	Phase Detector Assembly

<u>Parent No.</u>	<u>Date</u>	<u>Title</u>
3,218,547	11-16-65	Flux Sensing Device Using a Tubular Core with Toroidal Gating Coil and Solenoidal Output Coil
3,218,850	11-23-65	Thermo-protective Device for Balances
3,219,250	11-23-65	Flexible Back-up Bar
3,219,365	11-23-65	Spherical Shell
3,219,828	11-23-65	Vibrating Reticle Star Tracker
3,220,004	11-23-65	Passive Communication Satellite
3,221,547	12-7-65	Apparatus for Absorbing and Measuring Power
**3,221,549	12-7-65	Aircraft Instrument
*3,223,374	12-14-65	Miniature Vibration Isolator
3,224,001	12-14-65	Inflatable Radar Reflector Unit
3,224,173	12-21-65	Liquid-gas Separator System
3,224,263	12-21-65	Null-type Vacuum Microbalance
3,224,336	12-21-65	Missile Launch Release System
3,228,492	1-11-66	Double-Acting Shock Absorber
3,228,558	1-11-66	Measuring Device
3,229,059	1-11-66	Electro-Optical Alignment Control System
3,229,102	1-11-66	Radiation Direction Detector Including Means for Compensating for Photocell Aging
3,229,139	1-11-66	High Temperature Spark Plug
3,229,155	1-11-66	Electric Arc Device for Heating Gases
3,229,463	1-18-66	Trajectory-correction Propulsion System
3,229,568	1-18-66	Concave Grating Spectrometer
3,229,636	1-18-66	Missile Stage Separation Indicator and Stage Initiator
3,229,682	1-18-66	Device for Directionally Controlling Electromagnetic Radiation
3,229,689	1-18-66	Resuscitation Apparatus
3,229,884	1-18-66	Segmented Back-up Bar
3,229,930	1-18-66	Stretch Yo-Yo De-spin Mechanism
**3,230,053	1-18-66	Apparatus for Producing High Purity Silicon Carbide Crystals
3,230,377	1-18-66	Self-stabilized Theodolite for Manual Tracking Using Photosensitive Stabilizing Means
3,236,066	2-22-66	Energy Absorption Device
3,237,253	3-1-66	Method of Making Screen by Casting
3,238,345	3-1-66	Hypersonic Test Facility
3,238,413	3-1-66	Magnetically Controlled Plasma Accelerator
3,238,715	3-8-66	Electrostatic Ion Engine Having a Permanent Magnetic Circuit
3,238,730	3-8-66	Anti-backlash Circuit for Hydraulic Drive System
3,238,774	3-8-66	Pressurized Cell Micrometeroid Detector
*3,238,777	3-8-66	Differential Temperature Transducer
3,239,660	3-8-66	Illumination System Including a Virtual Light Source
3,242,716	3-29-66	Apparatus for Measuring Thermal Conductivity
3,243,154	3-29-66	Vibration Damping System
3,243,791	3-29-66	Bi-carrier Demodulator with Modulation
3,249,012	5-3-66	Umbilical Disconnect
**3,249,013	5-3-66	Remote Controlled Tubular Disconnect
3,251,053	5-10-66	Analog to Digital Converter
3,252,100	5-17-66	Pulse Generating Circuit
3,254,395	6-7-66	Method for Making a Rocket Motor Casing
3,254,497	6-7-66	Rocket Motor Casing
3,257,780	6-28-66	Zero Gravity Separator
3,258,582	6-28-66	Energy Management System for Glider Type Vehicle
3,258,687	6-28-66	Wide Range Linear Fluxgate Magnetometer
3,258,831	7-5-66	Method of Making a Molded Connector

Patent No.	Date	Title
3,258,912	7-5-66	Method of Igniting Solid Propellants
3,258,918	7-5-66	Fluid Dispensing Apparatus and Method
**3,260,055	7-12-66	Automatic Thermal Switch
3,260,204	7-12-66	Velocity Package
3,260,326	7-12-66	Wind-tunnel Microphone Structure
3,261,210	7-19-66	Superconductive Accelerometer
3,262,186	7-26-66	Method of Improving the Reliability of a Rolling Element System
3,262,262	7-26-66	Electrostatic Ion Rocket Engine
3,262,351	7-26-66	Separation Nut
3,262,365	7-26-66	Space Capsule Ejection Assembly
3,262,395	7-26-66	Hydraulic Transformer
3,262,518	7-26-66	Emergency Escape System
3,262,655	7-26-66	Alleviation of Divergence During Rocket Launch
3,263,016	7-26-66	Black-body Furnace
3,263,171	7-26-66	Micro Current Measuring Device Using Plural Logarithmic Response Heated Filamentary Type Diodes
3,263,610	8-2-66	Quick-Release Connector
**3,264,135	8-2-66	Method of Coating Carbonaceous Base To Prevent Oxidation Destruction and Coated Base
3,270,441	9-6-66	Reduced Gravity Simulator
3,270,499	9-6-66	Injector Assembly for Liquid Fueled Rocket Engines
3,270,501	9-6-66	Aerodynamic Spike Nozzle
3,270,503	9-6-66	Ablation Structures
3,270,504	9-6-66	Automatically Deploying Nozzle Exit Cone Extension
3,270,505	9-6-66	Control System for Rocket Vehicles
**3,270,512	9-6-66	Intermittent Type Silica gel Absorption Refrigerator
3,270,565	9-6-66	Omnidirectional Acceleration Device
3,270,756	9-6-66	Fluid Flow Control Valve
3,270,802	9-6-66	Method and Apparatus for Varying Thermal Conductivity
3,270,835	9-6-66	Device for Suppressing Sound and Heat Produced by High-velocity Exhaust Jets
3,270,908	9-6-66	Space Capsule
3,270,985	9-6-66	Reactance Control System
3,270,986	9-6-66	Hand-held Self-maneuvering Unit
3,270,988	9-6-66	Minimum Induced Drag Airfoil Body
**3,270,989	9-6-66	Variable Sweep Aircraft
3,270,990	9-6-66	Absorptive Splitter for Closely Spaced Supersonic Engine Air Inlets
3,271,140	9-6-66	High Temperature Cobalt-Base Alloy
**3,271,181	9-6-66	Method of Coating Carbonaceous Base To Prevent Oxidation Destruction and Coated Base
3,271,532	9-6-66	Three-axis Finger Tip Controller for Switches
3,271,558	9-6-66	Spectral Method for Monitoring Atmospheric Contamination of Inert-gas Welding Shields
3,271,594	9-6-66	Transient Augmentation Circuit for Pulse Amplifiers
**3,271,620	9-6-66	Starting Circuit for Vapor Lamps and the Like
3,271,637	9-6-66	Gas Solar Detector Using Manganese as a Doping Agent
3,271,649	9-6-66	Regenerative Braking System
3,273,094	9-13-66	Superconducting Magnet
3,273,355	9-20-66	Heat Protective Apparatus
3,273,381	9-20-66	Means and Method of Measuring Viscoelastic Strain
3,273,388	9-20-66	Apparatus for Measuring Electric Field Strength on the Surface of a Model Vehicle
3,273,392	9-20-66	Hot Wire Liquid Level Detector for Cryogenic Fluids
3,273,399	9-20-66	Traversing Probe

Patent No.	Date	Title
3,274,304	9-20-66	Method of Making Impurity-Type Semiconductor Electrical Contacts
*3,276,251	10-4-66	Test Unit Pre-Flight Suspension System
3,276,376	10-4-66	Thrust and Direction Control Apparatus
3,276,602	10-4-66	Cable Arrangement for Rigid Tethering Separator
3,276,679	10-4-66	Flight Craft
3,276,722	10-4-66	Inflation System for Balloon Type Satellites
3,276,726	10-4-66	High Temperature Cobalt-Base Alloy
3,276,865	10-4-66	Nickel-Base Alloy Containing Mo-W-Al-Cr-Ta-Zr-C-Nb-B
3,276,866	10-4-66	Low Friction Magnetic Recording Tape
3,276,946	10-4-66	High-Efficiency Multivibrator
3,277,314	10-4-66	Insertion Loss Measuring Apparatus Having Transformer Means Connected Across a Pair of Bolometers
3,277,366	10-4-66	Serrodyne Frequency Converter Re-entrant Amplifier System
3,277,373	10-4-66	Reentry Communication by Material Addition
3,277,375	10-4-66	Condition and Condition Duration Indicator
3,277,458	10-4-66	Method and Means for Damping Nutation in a Satellite
3,277,486	10-4-66	Method and Construction for Protecting Heat Sensitive Bodies From Thermal Radiation and Convective Heat
3,279,193	10-18-66	Training Vehicle for Controlling Attitude
3,281,963	11-01-66	Rotating Space Station Simulator
3,281,964	11-01-66	Controlled Visibility Device for an Aircraft
**3,281,965	11-01-66	Molecular Beam Velocity Selector
3,282,035	11-01-66	Instrument for Measuring Torsional Creep and Recovery
3,282,091	11-01-66	Stabilization of Gravity Oriented Satellites
3,282,532	11-01-66	Attitude Control System for Sounding Rockets
3,282,541	11-01-66	Non-magnetic Battery Case
3,282,739	11-01-66	Sealed Battery Gas Manifold Construction
**3,282,740	11-01-66	Multiple Circuit Switch Apparatus With Improved Pivot Actuator Structure
3,283,088	11-01-66	AC Logic Flip-Flop Circuits
3,283,175	11-01-66	Apparatus for Field Strength Measurement of a Space Vehicle
3,283,241	11-01-66	Pressure suit tie-down mechanism
3,286,274	11-22-66	Omni-Directional Anisotropic Molecular Trap
3,286,531	11-22-66	Multi-mission module
3,286,629	11-22-66	Spacecraft separation system for spinning vehicles and/or payloads
3,286,630	11-22-66	Booster tank system
3,286,882	11-22-66	Roll attitude star sensor system
3,286,953	11-22-66	Flexible wing deployment device
3,286,957	11-22-66	Indexed Keyed Connection
3,287,031	11-22-66	Prevention of pressure build-up in electrochemical cells
3,287,174	11-22-66	Digital television camera control system
3,287,496	11-22-66	Apparatus for increasing ion engine beam density
3,287,582	11-22-66	Pulse Counting circuit which simultaneously indicates the occurrence of the Nth pulse
3,287,640	11-22-66	Solid State chemical source for ammonia beam maser
**3,287,660	11-22-66	Phase-locked loop with a sideband rejecting properties
3,287,725	11-22-66	Method & Apparatus for determining Electromagnetic characteristics of Large Surface Area Passive Reflectors
3,289,205	11-29-66	

Patent No.	Date	Title
3,295,360	01-03-67	Dynamic sensor
*3,295,366	01-03-67	Support apparatus for dynamic testing
3,295,377	01-03-67	Angular accelerometer
3,295,386	01-03-67	Three axis controller
3,295,512	01-03-67	Foldable solar concentrator
3,295,545	01-03-67	Liquid storage tank venting device for zero gravity environment
3,295,556	01-03-67	Foldable conduit
**3,295,684	01-03-67	High pressure filter
3,295,699	01-03-67	Folding boom assembly
3,295,782	01-03-67	Endless tape cartridge
3,295,790	01-03-67	Recoverable single stage spacecraft booster
3,295,791	01-03-67	Storage container mounting for space vehicles
3,295,798	01-03-67	Landing gear
**3,295,808	01-03-67	Parallel motion suspension device
3,296,060	01-03-67	Unrefined-ceramic flame resistant insulation and method of making the same
3,296,526	01-03-67	Micrometer/1 velocity measuring device
3,296,531	01-03-67	Electrostatic plasma modulator for space vehicle re-entry communication
3,298,175	01-17-67	Method and device for cooling
3,298,182	01-17-67	Ignition means for monopropellant
3,298,221	01-17-67	Densitometer
3,298,285	01-17-67	Reinforcing means for diaphragms
3,298,362	01-17-67	Instrument for use in performing a controller Valsalva Maneuver
3,298,582	01-17-67	Camera film feed having a detent means
*3,299,364	01-17-67	Folded traveling wave maser structure
3,299,431	01-17-67	Unfurlable structure including coiled strips thrust launched upon tension release
3,299,913	01-24-67	Adjustable Tension Wire Guide
3,300,162	01-24-67	Radial module space station
3,300,717	01-24-67	Method & Apparatus for measuring potentials in plasmas
3,300,721	01-24-67	Means for communication through a layer of ionized gases
3,300,847	01-31-67	Portable alignment tool
3,300,949	01-31-67	Liquid-gas separator for zero gravity environment
3,300,981	01-31-67	Zero gravity starting means for liquid propellant motors
3,301,046	01-37-67	Method of obtaining permanent record of surface flow phenomena
3,301,315	01-31-67	Thermal conductive connection and method of making same
3,301,507	01-31-67	Hypersonic Re-entry Vehicle
3,301,511	01-31-67	Wing Deployment Method and Apparatus
3,301,578	01-31-67	Cryogenic connector for vacuum use
3,302,023	01-31-67	Apparatus for producing three dimensional recordings of fluorescence spectra
3,302,040	01-31-67	Linear sawtooth voltage-wave generator employing transistor timing circuit having capacitor-zener diode combination feedback
3,302,569	02-07-67	Quick release separation mechanism
3,302,633	02-07-67	Universal pilot restraint suit and body support therefor
*3,302,662	02-07-67	Antiflutter ball check valve
3,302,960	02-07-67	Locking device with rolling detents
3,303,304	02-07-67	Discrete Local Altitude Sensing Device
3,304,028	02-14-67	Attitude control for spacecraft
3,304,718	02-21-67	Double optic system for ion engine
3,304,724	02-21-67	Tank construction for space vehicles
3,304,729	02-21-67	Cryogenic Storage System
*3,304,768	02-21-67	Fatigue testing device
3,304,773	02-21-67	Force transducer
3,304,799	02-21-67	Proportional controller
3,304,865	02-21-67	Self-sealing, unbonded, rocket motor nozzle closure

Patent No.	Date	Title
3,305,415	02-21-67	Process for preparing sterile solid propellants
3,305,636	02-21-67	Phase-shift data transmission system having a pseudo-noise sync code modulated with the data in a single channel
**3,305,801	02-21-67	Variable time constant smoothing circuit
**3,305,810	02-21-67	Solenoid construction
3,305,861	02-21-67	Closed Loop Ranging System
3,305,870	02-21-67	Dual Mode Horn Antenna
3,307,407	03-07-67	Micro-particle impact sensing apparatus
3,308,848	03-14-67	Fluid power transmission
3,309,012	03-14-67	Thermal pump-compressor for space use
3,309,961	03-21-67	Hermetically sealed explosive release mechanism
*3,310,054	03-21-67	File card marker
*3,310,138	03-21-67	Viscous-pendulum damper
3,310,256	03-21-67	Aerodynamic protection for space flight vehicles
3,310,258	03-21-67	Technique for control of free-flight rocket vehicles
3,310,261	03-21-67	Control for flexible parawing
3,310,262	03-21-67	Supersonic Aircraft
3,310,443	03-21-67	Method of forming thin window drifted silicon charged particle detector
3,310,978	03-28-67	Fiber optic vibration transducer and analyzer
3,310,980	03-28-67	Hydraulic support for dynamic testing
**3,311,315	03-28-67	Endless tape transport mechanism
3,311,502	03-28-67	Didymium hydrate additive to nickel hydroxide electrodes
3,311,510	03-28-67	Method of making a silicon semiconductor device
3,311,748	03-28-67	Sun tracker with rotatable plane-parallel plate and two photocells
**3,311,772	03-28-67	Focusing system for an ion source having apertured electrodes
3,311,832	03-28-67	Multiple Input Radio Receiver
3,312,101	04-04-67	Gas Analyzer for Bi-gaseous mixtures
3,316,716	05-02-67	Composite Powerplant and Shroud Therefor
3,316,752	05-02-67	Method and Apparatus for detection and location of microleaks
*3,316,991	05-02-67	Automatic Force measuring system
3,317,180	05-02-67	High Pressure regulator valve
3,317,341	05-02-67	Metallic film diffusion for boundary lubrication
3,317,352	05-02-67	Method for determining the state of charge of batteries by the use of tracers
3,317,641	05-02-67	Method For Molding Compounds
3,317,731	05-02-67	Canopus Detector Including Automatic Gain Control of Photomultiplier Tube
3,317,751	05-02-67	Reversible Ring Counter Employing Cascaded Single SCR Stages
3,317,797	05-02-67	Microelectronic Module Package
3,317,825	05-02-67	Three-Wire Ground Type Electrical Receptacle Tester
3,317,832	05-02-67	Single or Joint Amplitude Distribution Analyzer
3,317,846	05-02-67	Linear Accelerator for Micrometeoroids Having a Variable Voltage Source
3,318,093	05-09-67	Hydraulic Drive Mechanism
3,318,096	05-09-67	Purge Device for Thrust Engines
3,318,343	05-09-67	Tool Attachment for Spreading Loose Elements Away From Work
*3,318,622	05-09-67	All-Directional Fastener
3,319,175	05-09-67	Electronic Amplifier With Power Supply Switching
3,319,979	05-16-67	Quick Attach and Release Fluid Coupling Assembly
3,320,669	05-23-67	Line Cutter
3,321,034	05-23-67	Sample Collecting Impact Bit

Patent No.	Date	Title
3,321,154	05-23-67	Transpirationally Cooled Heat Ablation System
3,321,157	05-23-67	Double-Hinged Flap
3,321,159	05-23-67	Techniques for Insulating Cryogenic Fuel Containers
*3,321,570	05-23-67	Printed circuit board with bellows rivet connection
3,321,628	05-23-67	Baseline stabilization system for ionization detector
**3,321,645	05-23-67	Switching circuit employing regeneratively connected complementary transistors
3,321,922	05-30-67	Small Rocket Engine
3,323,356	06-06-67	Apparatus for Positioning and Loading a test specimen
3,323,362	06-06-67	Positive Displacement Flowmeter
3,323,370	06-06-67	Mass measuring system
**3,323,386	06-06-67	Two-axis controller
3,323,408	06-06-67	Optical alignment system
3,323,484	06-06-67	Liquid Flow Sight Assembly
**3,323,967	06-06-67	Masking Device
3,324,370	06-06-67	Electronic Beam Switching Commutator
3,324,388	06-06-67	Meteoroid sensing apparatus having a coincidence network connected to a pair of capacitors
**3,324,423	06-06-67	Dual waveguide mode source having control means for adjusting the relative amplitudes of two modes
3,324,659	06-13-67	Electrostatic Thrustor with Improved Insulators
3,325,229	06-13-67	Air Bearing
3,325,723	06-13-67	Voltage-current characteristic simulator
3,325,749	06-13-67	Variable Frequency Oscillator with Temperature Compensation
3,326,043	06-20-67	Inductive Liquid Level Detection System
3,326,407	06-21-67	Thin-walled pressure vessel
3,327,298	06-21-67	System for recording and reproducing pulse code modulated data
*3,327,991	06-27-67	Valve seat with Resilient Support Member
3,328,624	06-27-67	High efficiency ionizer assembly
3,329,375	07-04-67	Attitude Control and damping system for spacecraft
3,329,918	07-04-67	High voltage divider system
3,330,052	07-11-67	Subgravity Simulator
*3,330,082	07-11-67	Central spar and module joint
3,330,510	07-11-67	Orbital Escape Device
3,330,549	07-11-67	Shock Absorber
3,331,071	07-11-67	Satellite Communication System
3,331,246	07-18-67	Hypersonic test facility
3,331,255	07-18-67	Non-magnetic, explosive actuated indexing device
3,331,404	07-18-67	Apparatus for purging systems handling
3,331,951	07-18-67	Trigonometric Vehicle Guidance Assembly which aligns the three perpendicular axes of two-axis systems
**3,333,152	07-25-67	Self-repeating plasma accelerator
3,333,788	08-01-67	Artificial gravity spin deployment system
3,336,725	08-22-67	Canister closing device
3,336,748	08-22-67	Plasma Device Feed System
3,337,004	08-22-67	Impact energy absorber
3,337,279	08-22-67	Gas purged dry box glove
3,337,315	08-22-67	Method for Fiberizing Ceramic Materials
3,337,337	08-22-67	Method for producing fiber reinforced metallic composites
**3,337,790	08-22-67	Mercury capillary interrupter
3,337,812	08-22-67	Circulator having quarter wavelength resonant post and parametric amplifier circuits utilizing the same
3,339,404	09-05-67	Lunar Penetrometer
3,339,863	09-05-67	Solar vane actuator
3,340,099	09-05-67	Bonded elastomeric seal for electrochemical cells

Patent No.	Date	Title
3,340,395	09-05-67	Time-of-flight mass spectrometer with feed-back means from the detector to the ion sources and a specific counter
3,340,397	09-05-67	Multiple environment materials test chamber having a multiple port X-ray tube for irradiating a plurality of samples
**3,340,430	09-05-67	Diode and protection fuse unit
3,340,532	09-05-67	Tracking receiver
3,340,599	09-12-67	Simple method of making photovoltaic junctions
3,340,713	09-12-67	Spin forming tubular elbows
3,340,727	09-12-67	Ablation Probe
3,340,732	09-12-67	Meteorological Balloon
3,341,151	09-12-67	Apparatus providing a directive field pattern and attitude sensing of a spin stabilized satellite
3,341,169	09-12-67	Filler Valve
3,341,708	09-12-67	Amplitude modulated laser transmitter
3,341,778	09-12-67	Optimum pre-detection diversity receiving system
**3,341,977	09-19-67	Conforming Polisher for aspheric surfaces of revolution
3,342,055	09-19-67	Protective device for machine and metalworking tools
3,342,066	09-19-67	Model launcher for wind tunnels
*3,342,653	09-19-67	Method of making inflatable honeycomb
*3,343,180	09-26-67	Stretcher
3,343,189	09-26-67	Rescue litter floatation assembly
3,344,340	09-26-67	Regulated power supply
3,344,425	09-26-67	Monopulse Tracking System
3,345,820	10-10-67	Electron Bombardment Ion Engine
3,345,822	10-10-67	Burning rate control of solid propellants
3,345,840	10-10-67	Tube Dimpling Tool
*3,345,866	10-10-67	Multilegged Support System
3,346,419	10-10-67	Solar cell mounting
3,346,515	10-10-67	Method of producing alternating ether-siloxane copolymers
3,346,724	10-10-67	Random Function Tracer
3,346,806	10-10-67	Pressure monitoring with a plurality of ionization gauges controlled at a central location
3,346,929	10-17-67	Latching Mechanism
3,347,046	10-17-67	Control of transverse instability in rocket combustors
3,347,057	10-17-67	Rapid cooling method and apparatus
3,347,309	10-17-67	Self Adjusting Multi-Segment, Deployable Natural Circulation Radiator
3,347,465	10-17-67	Prestressed refractor structure
3,347,466	10-17-67	Nacelle Afterbody for jet engines
3,347,531	10-17-67	Stirring apparatus for plural test tubes
3,347,665	10-17-67	Low temperature aluminum alloy
3,348,048	10-17-67	Horizon sensor with a plurality of fixedly-positioned radiation-compensated radiation sensitive detector
3,348,053	10-17-67	Amplifier Clamping Circuit for horizon scanner
3,348,152	10-17-67	Diversity receiving system
3,349,814	10-31-67	Method and apparatus for making a heat insulating and ablative structure
3,350,033	10-31-67	Reaction wheel scanner
3,350,034	10-31-67	Satellite appendage tie-down cord
3,350,643	10-31-67	Signal-to-noise ratio estimated by taking ratio of mean and standard deviation of integrated signal samples
**3,350,671	10-31-67	High power-high voltage waterload
**3,350,926	11-07-67	Miniature Stress Transducer
3,352,157	11-14-67	Inertia diaphragm pressure transducer
*3,352,192	11-14-67	Split nut separation system
3,353,359	11-21-67	Multislot film cooled pyrolytic graphite rocket nozzle
3,354,098	11-21-67	Elastomeric Silazane polymers and process for preparing the same
3,354,320	11-21-67	Light position locating system

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3,354,462	11-21-67	Event Recorder
3,355,861	12-05-67	Mixture Separation Cell
3,355,948	12-05-67	Spherical Tank Gauge
3,356,320	12-05-67	Device for Separating Occupant from an ejection seat
*3,356,549	12-05-67	Method and apparatus for bonding a plastics sleeve onto a metallic body
3,356,885	12-05-67	Small plasma probe
3,357,024	12-05-67	Method of recording a gas flow pattern
*3,357,093	12-12-67	Soldering with solder flux which leaves corrosion-resistant coating
3,357,237	12-12-67	Ablation Sensor
3,357,862	12-12-67	Combined Electrolysis device and fuel cell and method of operation
3,358,145	12-12-67	Radiation detector readout system
*3,358,264	12-12-67	Coaxial Cable Connector
3,359,046	12-19-67	Bismuth-lead coatings for gas bearings used in atmospheric environments and vacuum chambers
3,359,132	12-19-67	Method of coating circuit paths on printed circuit boards with solder
3,359,409	12-19-67	Correlation function apparatus
**3,359,435	12-19-67	Holder for crystal resonators
3,359,555	12-19-67	Polarization diversity monopulse tracking receiver
*3,359,819	12-26-67	Bidirectional step torque filter with zero backlash characteristic
*3,359,855	12-26-67	Optical projector system
3,360,798	12-26-67	Collapsible reflector
3,360,864	01-02-68	Internal flare angle gauge
**3,360,972	01-02-68	Magnetomotive metal working device
3,360,980	01-02-68	Vapor pressure measuring system and method
3,360,988	01-02-68	Electric arc apparatus
3,361,045	01-02-68	Fast-opening diaphragm
**3,361,067	01-02-68	Piezoelectric pump
3,361,400	01-02-68	Clamping assembly for components inertial
*3,361,666	01-02-68	Inorganic solid film lubricants
3,361,985	01-02-68	Signal detection and tracking apparatus
3,364,311	01-16-68	Elimination of frequency shift in a multiplex communication system
3,364,366	01-16-68	Multiple Slope Sweep Generator
*3,364,578	01-23-68	Ellipsograph for Pantograph
3,364,631	01-23-68	Inflatable Support Structure
3,364,777	01-23-68	Null Device for Hand Controller
3,364,813	01-23-68	Self-Calibrating displacement transducer
3,365,580	01-23-68	Film reader with transparent capstan and U-shaped light conducting rod
3,365,657	01-23-68	Power Supply
3,365,665	01-23-68	Hall current measuring apparatus having a series resistor for temperature compensation
3,365,897	01-30-68	Cryogenic Thermal Insulation
3,365,930	01-30-68	Thermal shock apparatus
3,365,941	01-30-68	Precision thrust gage
3,366,886	01-30-68	Linear accelerator frequency control system
3,366,894	01-30-68	Variable duration pulse integrator
3,367,114	02-06-68	Construction and Method of Arranging a Plurality of Ion Engines
**3,367,121	02-06-68	Refrigeration device
3,367,182	02-06-68	Heat Flux System
3,367,224	02-06-68	Aligning and Positioning Device
3,367,271	02-06-68	Automatic Pump
3,367,308	02-06-68	Exposure system for animals
*3,367,445	02-06-68	Fluid Lubricant System
3,368,486	02-13-68	Single Action Separation Mechanism
3,369,222	02-13-68	Data Compressor
3,369,223	02-13-68	Incremental tape recorder and data rate converter
3,369,564	02-20-68	Transfer Valve

Patent No.	Date	Title
3,370,039	02-20-68	Process for Preparation of High-Molecular-Weight Polyaryloxyallenes
3,372,588	03-12-68	Constant temperature heat sink for calorimeters
*3,373,069	03-12-68	Method of Making an Inflatable Panel
3,373,404	03-12-68	Error-Correcting Method and Apparatus
3,373,430	03-12-68	Omnidirectional Microwave Spacecraft Antenna
3,373,431	03-12-68	Low Noise Single Aperture Multimode Monopulse Antenna Feed System
3,373,640	03-19-68	Apparatus for Machining Geometric Cones
3,373,914	03-19-68	Automatic Welding Speed Controller
3,374,339	3-19-68	Counter and Shift-Register
3,374,366	03-19-68	Complementary Regenerative Switch
**3,374,830	02-26-68	Thermal Control Panel
3,374,966	03-26-68	Control System
3,375,451	03-26-68	Adaptive Tracking Notch Filter System
3,375,479	03-26-68	Continuous Turning Slip Ring Assembly
3,376,730	04-09-68	Friction Measuring Apparatus
3,377,208	04-09-68	Thermocouple Assembly
3,377,845	04-16-68	Moment of Inertia Test Fixture
3,378,315	04-16-68	Hybrid Lubrication System and Bearing
3,378,851	04-23-68	Soft Frame Adjustable Eyeglasses
*3,378,892	04-23-68	Quick Attach Mechanism
3,379,064	04-23-68	Automatic Recording McLeod Gauge
3,379,330	04-23-68	Cryogenic Insulation System
3,379,885	04-23-68	Light Switch Using an Infrared Source and Sensor
3,379,974	04-23-68	Particle Detection Apparatus Including a Ballistic Pendulum
3,380,042	04-23-68	Digital Telemetry System
3,380,049	04-23-68	Method of Resolving Clock Synchronization Error and Means Therefor
*3,381,339	05-07-68	Hydraulic Casting of Liquid Polymers
3,381,517	05-07-68	Rotary Bead Dropper and Selector For Testing Micrometeorite Detectors
3,381,527	05-07-68	Tension Measurement Device
3,381,569	05-17-68	Attitude Sensor For Space Vehicles
3,381,778	05-07-68	Energy Absorbing Device
*3,382,082	05-07-68	Foamed-In-Place Ceramic Refractory Insulating Material
3,382,105	05-17-68	Ion-Exchange Membrane and Electrode Assembly
3,382,107	05-17-68	Sealing Device For An Electrochemical Cell
3,382,714	05-14-68	Heat Sensing Instrument
3,383,461	05-14-68	Reduced Bandwidth Video Communication System Utilizing Sampling Technique
3,383,524	05-14-68	Solid State Pulse Generator With Constant Output Width, For Variable Input Width, In Nanosecond Range
3,383,903	05-21-68	Pressure Transducer Calibrator
3,383,922	05-21-68	Linear Differential Pressure Sensor
3,384,016	05-21-68	Lateral Displacement System For Separated Rocket Stages
3,384,075	05-21-68	Thermal Control Wall Panel
3,384,111	05-21-68	Positive Locking Check Valve
**3,384,324	05-21-68	Thermal Control Wall Panel
*3,384,820	05-21-68	Vibrating Element Electrometer With Output Signal Magnified Over Input Signal By A Function Of The Mechanical Q Of The Vibrating Element
3,384,895	05-21-68	Portable Superclean Air Column Device
3,385,036	05-28-68	Portable Superclean Air Column Device
3,386,337	06-04-68	Portable Milling Tool
**3,386,685	06-04-68	Spacecraft Airlock
3,386,686	06-04-68	Station Keeping Of A Gravity-Gradient Stabilized Satellite
3,387,149	06-04-68	Phonocardiograph Transducer
3,388,258	06-11-68	Fluid Flow Meter With Comparator Reference Means

Patent No.	Date	Title
**3,388,387	06-11-68	Drive Circuit Utilizing Two Cores
**3,388,590	06-18-68	Connector Internal Force Gauge
3,389,017	06-18-68	Sealing Member And Combination Thereof And Method Of Producing Said Sealing Member
3,389,260	06-18-68	Solar Sensor Having Coarse And Fine Sensing With Matched Preirradiated Cells and Method of Selecting Cells
3,389,346	06-18-68	Compensating Bandwidth Switching Transients In An Amplifier Circuit
3,389,877	06-23-68	Inflatable Tether
3,390,017	06-23-68	Sealed Electrochemical Cell Provided With A Flexible Casing
3,390,020	06-23-68	Semiconductor Material And Method Of Making Same
3,390,282	06-23-68	Passive Synchronized Spike Generator With High Input Impedance And Low Output Impedance And Capacitor Power Supply
**3,390,378	06-23-68	Comparator For The Comparison Of Two Binary Numbers
3,391,080	07-02-68	Metallic Film Diffusion For Boundary Lubrication
3,392,403	07-09-68	Measurement Of Time Differences Between Luminous Events
3,392,586	07-16-68	Device For Measuring Pressure
3,392,864	07-16-68	Insulation System
3,392,865	07-16-68	Filament-Wound Container
3,392,936	07-16-68	Leading Edge Curvature Based On Convective Heating
**3,393,059	07-16-68	Decontamination of Petroleum Products
3,393,330	07-16-68	Thermionic Converter With Current Augmented By Self-Induced Magnetic Field
3,393,332	07-16-68	Superconducting Alternator
3,393,380	07-16-68	Phase Locked Phase Modulator Including A Voltage Controlled Oscillator
3,393,347	07-16-68	Power Supply Circuit
3,393,384	07-16-68	Radio Frequency Coaxial High Pass Filter
3,394,359	07-23-68	Digital Memory Sense Amplifying Means
3,394,975	07-30-68	Petzval Type Objective Including Field Shaping Lens
**3,395,053	07-30-68	Thermal Control Coating
3,396,057	08-06-68	Method Of Electrolytically Binding A Layer of Semiconductors Together
3,396,184	08-06-68	Trialkyl-Dihalotantalum And Niobium Compounds
3,396,303	08-06-68	ARC Electrode Of Graphite With Ball Tip
3,396,584	08-13-68	Space Simulation And Radiative Property Testing System and Method
3,396,920	08-13-68	Apparatus For Changing The Orientation And Velocity Of A Spinning Body Traversing A Path
**3,397,094	08-13-68	Method Of Changing The Conductivity Of Vapor Deposited Gallium Arsenide By The Introduction Of Water Into The Vapor Deposition Atmosphere
*3,397,117	08-13-68	Compact Solar Still
3,397,318	08-13-68	Ablation Sensor
3,397,512	08-20-68	Vapor-Liquid Separator
3,397,932	08-20-68	Semi-Linear Ball Bearing
3,399,299	08-27-68	Apparatus For Phase Stability Determination
3,399,574	09-03-68	Method For Leakage Testing of Tanks
3,404,848	10-01-68	Low Level Signal Limiter
3,405,406	10-15-68	Hard Space Suit
3,405,887	10-15-68	Ring Wing Tension Vehicle
3,406,336	10-15-68	RC Rate Generator For Slow Speed Measurement
*3,406,742	10-22-68	Automatic Fatigue Test Temperature Programmer

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3,407,304	10-22-68	Micrometeoroid Penetration Measuring Device
3,408,816	11-05-68	Rocket Engine Injector
3,408,861	11-05-68	Rocket Engine Thrust Vector Deviation Measurement Device
3,408,870	11-05-68	Zero Gravity Apparatus
3,409,247	11-05-68	Solid State Thermal Control Polymer Coating
3,409,252	11-05-68	Controllers
3,409,554	11-05-68	Gd or Sm Doped Silicon Semi-Conductor Composition
3,409,730	11-05-68	Thermal Radiation Shielding
*3,411,356	11-19-68	Zeta Potential Flow Meter
3,412,559	11-26-68	Ion Engine Casing Construction And Method of Making Same
3,412,598	11-26-68	Impact Testing Machine
*3,412,729	11-26-68	Method And Apparatus For Continuously Monitoring Blood Oxygenation, Blood Pressure, Pulse Rate and The Pressure Pulse Curve Utilizing An Ear Oximeter As Transducer
3,412,961	11-26-68	Means For Suppressing Or Attenuating Bending Motion Of Elastic Bodies
*3,413,115	11-26-68	Brazing Alloy
3,413,510	11-26-68	Electronic Cathode Having A Brush-Like Structure And A Relatively Thick Oxide Emissive Coating
3,413,536	11-26-68	Automatic Battery Charger
3,414,012	12-03-68	Dual Latching Solenoid Valve
3,414,358	12-03-68	Optical Monitor Panel
3,415,032	12-10-68	Evacuation Port Seal
3,415,069	12-10-68	High Pressure Helium Purifier
3,415,116	12-10-68	Floating Two-Force-Component Measuring Device
3,415,126	12-10-68	Azimuth Laying System
3,415,156	12-10-68	Controlled Release Device
*3,415,556	12-10-68	Ceramic-To-Metal Seal And Method Of Making Same
3,415,643	12-10-68	High Temperature Ferromagnetic Cobalt-Base
3,415,992	12-10-68	Extended Area Semiconductor Radiation Detectors And A Novel Readout Arrangement
3,416,106	12-10-68	Broadband Microwave Waveguide Window
3,416,274	12-17-68	Flexibly Connected Support And Skin
*3,416,989	12-17-68	Alkali-Metal Silicate Protective Coating
3,416,975	12-17-68	Etching Of Aluminum For Bonding
3,416,988	12-17-68	Traveling Sealer For Contoured Table
3,417,247	12-17-68	Radiant Energy Intensity Measurement System
3,417,266	12-17-68	Pulse Modulator Providing Fast Rise And Fall Times
3,417,298	12-17-68	Polarity Sensitive Circuit
3,417,316	12-17-68	Sidereal Frequency Generator
3,417,321	12-17-68	Increasing Efficiency Switching-Type Regulator Circuits
3,417,382	12-17-68	Frequency Shift Keying Apparatus
3,417,399	12-17-68	Millimeter-Wave Radiometer For Radio-Astronomy
3,417,400	12-17-68	Triaxial Antenna
*3,419,329	12-31-68	Combined Optical Attitude And Altitude Indicating Instrument
3,419,363	12-31-68	Self-Lubricating Fluoride-Metal Composite Materials
3,419,483	12-31-68	Solar Cell And Circuit Array And Process For Nullifying Magnetic Fields
*3,419,537	12-31-68	Dicyanoacetylene Polymers
*3,419,827	12-31-68	Indexing Microwave Switch
3,419,964	01-07-69	Apparatus For Measuring Swelling Characteristics of Membranes
3,420,069	01-07-69	Condenser-Separator

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*3,420,223	01-07-69	Electrode For Biological Recording
3,420,225	01-07-69	Balanced Bellows Spirometer
3,420,338	01-07-69	Hermetic Sealed Vibration Damper
3,420,704	01-07-69	Depositing Semiconductor Films Utilizing A Thermal Gradient
3,420,945	01-07-69	Electrode and Insulator With Shielded Dielectric Junction
**3,420,978	01-07-69	Pretreatment Method For Anti-Wettable Materials
3,421,004	01-07-69	Solar Optical Telescope Dome Control System
3,421,053	01-07-69	Tumbler System To Provide Random Motion
3,421,056	01-07-69	Thin Window Drifted Silicon, Charged Particle Detector
3,421,105	01-07-69	Automatic Acquisition System For Phase-Lock Loop
*3,421,134	01-07-69	Electrical Connector
3,421,363	01-14-69	Harness For Vertically Supporting Slender Bodies For Vibration Testing
3,421,506	01-14-69	Relief Container
3,421,541	01-14-69	Relief Valve
3,421,549	01-14-69	Pneumatic System For Controlling And Actuating Pneumatic Cyclic Devices
*3,421,591	01-14-69	Rock Drill For Recovering Samples
3,421,700	01-14-69	Electromechanical Actuator
3,421,768	01-14-69	Foil Seal
**3,421,864	01-14-69	Multilayer Porous Ionizer
**3,421,948	01-14-69	Method Of Making Membranes
3,422,019	01-14-69	Method For Processing Ferrite Cores
3,422,213	01-14-69	Connector Strips
3,422,278	01-14-69	Signal Generator
**3,422,291	01-14-69	Magneto-hydrodynamic Induction Machine
*3,422,324	01-14-69	Pressure Variable Capacitor
3,422,352	01-14-69	Apparatus For Measuring Current Flow
**3,422,354	01-14-69	Test Fixture For Pellet-Like Electrical Elements
3,422,390	01-14-69	Coupling Device
3,422,403	01-14-69	Data Compression System
3,422,440	01-14-69	Plural Recorder System
3,423,179	01-21-69	Catalyst For Growth Of Boron Carbide Crystal Whiskers
3,423,290	01-21-69	Lyophilized Reaction Mixtures
*3,423,579	01-21-69	Electronic Divider And Multiplier Using Photoconductor
3,423,608	01-21-69	Nonmagnetic Thermal Motor For A Magnetometer
3,424,966	01-28-69	Synchronous Servo Loop Control System
3,425,131	02-04-69	Extensometer
3,425,486	02-04-69	Garments For Controlling The Temperature Of The Body
3,425,487	02-04-69	Space Suit Heat Exchanger
*3,426,230	02-04-69	Direct Radiation Cooling Of The Collector Of Linear Beam Tubes
**3,426,263	02-04-69	Method And Apparatus For Battery Charge Control
**3,426,272	02-04-69	Device For Determining The Accuracy Of The Flare On A Flared Tube
3,426,746	02-11-69	Method And Apparatus For Attaching Physiological Monitoring Electrodes
3,427,089	02-11-69	Ultraviolet Filter
3,427,097	02-11-69	Pneumatic Mirror Support System
3,427,205	02-11-69	Spacecraft Battery Seals
3,427,525	02-11-69	Regulated D.C. to D.C. Converter
3,428,761	02-18-69	Excitation And Detection Circuitry For A Flux Responsive Magnetic Head
3,428,812	02-18-69	Optical Spin Compensator
3,428,910	02-18-69	Automatic Gain Control System
3,428,919	02-18-69	Signal Multiplexer
3,428,928	02-18-69	Broadband Choke For Antenna Structure
3,429,477	02-25-69	Apparatus for Ejection Of An Instrument Cover

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3,429,529	02-25-69	Control Devices For Flexible Wing Aircraft
3,430,115	02-25-69	Apparatus For Ballasting High Frequency Transistors
3,430,182	02-25-69	Electrical Feed-Through Connection For Printed Circuit Boards And Printed Cables
3,430,237	02-25-69	Time Division Multiplex System
3,430,909	03-04-69	Device For Handling Heavy Loads
3,432,730	03-11-69	Semiconductor P-N Junction Stress And Strain Sensor
3,433,015	03-18-69	Gas Turbine Combustion Apparatus
*3,433,953	03-18-69	Compensating Radiometer
3,433,960	03-18-69	Retrodirective Optical System
3,433,961	03-18-69	Scanning Aspect Sensor Employing An Apertured Disc And A Commutator
3,434,037	03-18-69	Multiple Varactor Frequency Doubler
3,434,050	03-18-69	High Impedance Measuring Apparatus
3,434,064	03-18-69	Amplifier Drift Tester
3,434,885	03-25-69	Method Of Making Electrical Contact On Silicon Solar Cell And Resultant Product
3,435,246	03-25-69	Light Radiation Direction Indicator With A Baffle Of Two Parallel Grids
3,437,527	04-08-69	Method For Producing A Solar Cell Having An Integral Protective Covering
3,437,560	04-08-69	Use Of The Enzyme Hexokinase For The Reduction Of Inherent Light Levels
3,437,832	04-08-69	Ring Counter
3,437,874	04-08-69	Display For Binary Characters
3,437,903	04-08-69	Protection For Energy Conversion Systems
3,437,919	04-08-69	Cryogenic Apparatus For Measuring The Intensity Of Magnetic Fields
3,437,935	04-08-69	Varactor High Level Mixer
3,437,959	04-08-69	Helical Coaxial Resonator RF Filter
3,438,044	04-08-69	Monopulse System With An Electronic Scanner
3,438,263	04-15-69	Fluid Sample Collector
3,439,886	04-22-69	Visual Target For Retrofire Attitude Control
3,443,208	05-06-69	Optically Pumped Resonance Magnetometer For Determining Vectorial Components In A Spatial Coordinate System
3,444,380	05-13-69	Electronic Background Suppression Method And Apparatus For A Field Scanning Sensor
3,446,387	05-27-69	Piping Arrangement Through A Double Wall Chamber
3,446,676	05-27-69	Solar Battery With Interconnecting Means For Plural Cells
3,446,960	05-27-69	Device For Measuring Electron-Beam Intensities And For Subjecting Materials To Electron Irradiation In An Electron Microscope
3,446,992	05-27-69	Bus Voltage Compensation Circuit For Controlling Direct Current Motor
3,446,998	05-27-69	Bi-metallic Power Controlled Actuator
3,447,015	05-27-69	Ion Thruster Cathode
3,447,071	05-27-69	Probes Having Guard Ring and Primary Sensor At Same Potential To Prevent Collection Of Stray Wall Currents In Ionized Gases
3,447,154	05-27-69	Cooperative Doppler Radar System
3,447,155	05-27-69	Ranging System
3,447,283	06-03-69	Bonding Thermoelectric Elements To Nonmagnetic Refractory Metal Electrodes
3,477,774	06-03-69	High Pressure Air Valve
3,448,346	06-03-69	Extensible Cable Support
3,448,273	06-03-69	Plurality of Photosensitive Cells On A Pyramidal Base For Planetary Trackers
3,448,390	06-03-69	Variable-Width Pulse Integrator
3,448,341	06-03-69	Electrical Load Protection Device

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3,447,850	06-03-69	Sealed Cabinetry	3,460,378	08-12-69	Strain Gauge Measuring Techniques
3,450,878	06-17-69	Dosimeter For High Levels of Absorbed Radiation	3,460,759	08-12-69	Combustion Chamber
3,450,842	06-17-69	Doppler Frequency Spread Correction Device For Multiplex Transmissions	3,460,379	08-12-69	Tensile Strength Testing Device
3,450,946	06-17-69	Protective Circuit of the Spark Gap Type	3,461,437	08-12-69	Digital Memory In Which the Driving Of Each Word Location Is Controlled By A Switch Core
3,452,976	07-01-69	Printed Circuit Soldering Aid	3,460,397	08-12-69	Mechanical Actuator
3,452,872	07-01-69	Shock-Layer Radiation Measurement	3,461,393	08-12-69	Cascaded Complementary Pair Broad-band Transistor Amplifiers
3,453,172	07-01-69	Bonding Graphite With Fused Silver Chloride	3,461,290	08-12-69	Conically Shaped Cavity Radiometer With a Dual Purpose Cone Winding
3,452,423	07-01-69	Segmenting Lead Telluride-Silicon Germanium Thermoelements	3,461,721	08-19-69	Flow Field Simulation
3,458,313	07-29-69	High Resolution Developing of Photosensitive Resists	3,461,855	08-19-69	Conditioning Suit
3,458,833	07-29-69	Frequency Control Network For a Current Feedback Oscillator	3,463,563	08-26-69	Swivel Support For Gas Bearings
3,458,104	07-29-69	Weld Control System Using Thermocouple Wire	3,464,049	08-26-69	Load Cell Protection Device
3,458,162	07-29-69	Control Devices for Flexible Wing Aircraft	3,463,939	08-26-69	Pulsed Differential Comparator Circuit
3,458,112	07-15-69	Temperature Sensitive Capacitor Device	3,464,051	08-26-69	Electrical Spot Terminal Assembly
3,466,193	07-15-69	Phase Quadrature-Plural Channel Data Transmission System	3,464,012	08-26-69	Automatic Signal Range Selector For Metering Devices
3,458,702	07-29-69	Telespectrograph	3,463,001	08-26-69	Thrust Dynamometer
3,458,651	07-29-69	Television Simulation For Aircraft and Space Flight	3,464,016	08-26-69	Demodulation System
3,458,726	07-29-69	Power Control Circuit	3,463,673	08-26-69	Electrochemical Coulometer and Method of Forming
3,453,462	07-01-69	Slug Flow Magnetohydrodynamic Generator	3,464,018	08-26-69	Digitally Controlled Frequency Synthesizer
3,453,546	07-01-69	Telemeter Adaptable for Implanting In An Animal	3,464,652	09-02-69	Control Devices For Flexible Wing Aircraft
**3,454,410	07-08-69	Alkali-Metal Silicate Protective Coating	3,466,243	09-09-69	Alloys for Bearings
3,455,171	07-15-69	Inertial Reference Apparatus	3,465,482	09-09-69	Spacecraft Radiator Cover
3,456,201	07-15-69	System For Monitoring Signal Amplitude Ranges	3,466,198	09-09-69	Solar Cell Matrix
3,458,851	07-29-69	Electrical Connector Pin With Wiping Action	3,466,085	09-09-69	Articulated Multiple Couch Assembly
3,458,217	07-29-69	Tubular Coupling Having Low Profile Band Segments With Means for Preventing Relative Rotation	3,466,459	09-09-69	Current Steering Switch
3,455,121	07-15-69	Water Separating System	3,466,570	09-09-69	Inverter With Means For Base Current Shaping For Sweeping Charge Carriers From Base Region
*3,459,391	08-05-69	Interconnection of Solar Cells	3,465,986	09-09-69	Satellite Despin Device
3,460,995	08-12-69	Method and Device for Determining Battery State of Charge	3,466,484	09-09-69	Ionization-Vacuum Gauge With All But The End of the Ion-collector Shielded
3,460,381	08-12-69	Balance Torquemeter	3,466,424	09-09-69	Evaporant Source for Vapor Deposition
3,460,781	08-12-69	Tape Recorder	3,466,052	09-09-69	Foil Seal
3,460,784	08-12-69	Control Devices for Flexible Wing Aircraft	3,465,567	09-09-69	Method of Making Tubes
			3,465,569	09-09-69	Low Temperature Flexure Fatigue Cryostat
			3,465,747	09-09-69	Ballistocardiograph
			3,466,418	09-09-69	Determination of Spot Weld Quality
			3,466,560	09-09-69	Stable Amplifier Having A Stable Quiescent Point