

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM388454

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	Notice of Succession of Agency (Intellectual Property)		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
Wells Fargo Bank, National Association, as the Resigning Agent		06/17/2016	National Banking Association: UNITED STATES
RECEIVING PARTY DATA			
Name:	Bank of America, N.A., as the Successor Agent		
Street Address:	901 Main Street		
Internal Address:	TX1-492-14-06		
City:	Dallas		
State/Country:	TEXAS		
Postal Code:	75202		
Entity Type:	National Banking Association: UNITED STATES		
PROPERTY NUMBERS Total: 3			
Property Type	Number	Word Mark	
Registration Number:	2364319	ROCKETDYNE	
Registration Number:	0699654	ARCITE	
Registration Number:	0426781	AEROJET	
CORRESPONDENCE DATA			
Fax Number:	9192868199		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>			
Phone:	919 286-8000		
Email:	PTO_TMconfirmation@mvalaw.com		
Correspondent Name:	MOORE & VAN ALLEN PLLC		
Address Line 1:	3015 CARRINGTON MILL BOULEVARD		
Address Line 2:	SUITE 400		
Address Line 4:	MORRISVILLE, NORTH CAROLINA 27560		
ATTORNEY DOCKET NUMBER:	017625.004996		
NAME OF SUBMITTER:	John E. Slaughter		
SIGNATURE:	/John E. Slaughter/		
DATE SIGNED:	06/17/2016		

OP \$90.00 2364319

Total Attachments: 19

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NOTICE OF SUCCESSION OF AGENCY (INTELLECTUAL PROPERTY)

This **NOTICE OF SUCCESSION OF AGENCY (INTELLECTUAL PROPERTY)** (this "Notice"), dated as of June 17, 2016 (the "Effective Date"), is entered into among WELLS FARGO BANK, NATIONAL ASSOCIATION (including as successor-in-interest to Wachovia Bank, N.A.) ("Wells Fargo"), as Administrative Agent, Issuing Lender and Swingline Lender under the Credit Agreement as defined below (in such capacity, the "Resigning Agent"), BANK OF AMERICA, N.A., as the successor Administrative Agent, L/C Issuer and Swingline Lender ("Successor Agent") pursuant to the Successor Agency Agreement as defined below.

WHEREAS, pursuant to the Third Amended and Restated Credit Agreement, dated as of May 30, 2014 by and among Aerojet Rocketdyne Holdings, Inc. f/k/a GenCorp Inc. (the "Borrower"), the Material Domestic Subsidiaries of the Borrower (together with the Borrower, collectively the "Obligors"), the Lenders, and Wells Fargo (as amended, modified, extended, restated, amended and restated, replaced, or supplemented from time to time, the "Credit Agreement"), the Obligors and Wells Fargo entered into the Third Amended and Restated Security Agreement, dated as of May 30, 2014 (the "Security Agreement"), and the Notices of Grant of Security Interest identified on Schedule A attached hereto (the "IP Notices"), together with the Credit Agreement and Security Agreement, the "Agreements"), pursuant to which the Obligors granted to Resigning Agent a security interest in and to certain collateral;

WHEREAS, the IP Notices were recorded with the United States Patent and Trademark Office as identified on Schedule A attached hereto; and

WHEREAS, pursuant to the Successor Agency Agreement dated as of June 17, 2016 entered into among the Borrower, the Lenders under the Credit Agreement party thereto, the Resigning Agent, and the Successor Agent (the "Successor Agency Agreement"), the Resigning Agent resigned as, and Successor Agent was appointed and accepted appointment as, Administrative Agent, an L/C Issuer and Swingline Lender under that certain Fourth Amended and Restated Credit Agreement, dated as of June 17, 2016 (as amended, modified, extended, restated, amended and restated, replaced, or supplemented from time to time, the "Amended and Restated Credit Agreement"), by and among the Borrower, the guarantors party thereto, the lenders from time to time party thereto and the Successor Agent, as administrative agent, and Successor Agent succeeded to and was vested with all of the rights, powers, responsibilities, obligations and duties of the Administrative Agent, an L/C Issuer and Swingline Lender under the Amended and Restated Credit Agreement, and the Resigning Agent transferred, assigned, granted and conveyed unto the Successor Agent all of its right, title and interest in and to the Security Documents, together with any rider, addendum, exhibit, schedule and attachment thereto, and all Uniform Commercial Code financing statements filed in connection therewith, and the Collateral, together with all attendant liens, rights, title, assignments and interests (including security interests) pertaining to or arising from the Security Documents as set forth in the Successor Agency Agreement.

NOW, THEREFORE, the parties agree as follows:

1. Defined Terms. All capitalized terms used, but not otherwise defined herein, shall have the respective meanings ascribed in or otherwise referenced in the Agreements or Successor Agency Agreement, as applicable.

2. Succession and Replacement of Agency. Pursuant to the terms and conditions set forth in the Successor Agency Agreement, the Resigning Agent has ceased to be the Administrative Agent under the Agreements and is succeeded to and replaced by the Successor Agent as Administrative Agent (as defined in the Amended and Restated Credit Agreement) under the Agreements. Nothing herein shall be deemed to terminate, interrupt, or impair the continuity of the security interest in the collateral originally granted to


the Resigning Agent under the Agreements, including in the collateral identified on Schedule A attached hereto, which security interest is now succeeded by and transferred to the Successor Agent.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK; SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Notice to be executed and delivered by their respective duly authorized officers as of the date first above written.

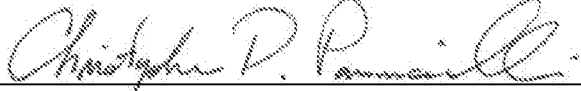
RESIGNING AGENT:

WELLS FARGO BANK, NATIONAL ASSOCIATION,
as the Resigning Agent

By: 
Name: Christopher J. Barr
Title: VP

SUCCESSOR AGENT:

BANK OF AMERICA, N.A., as the Successor Agent

By: 

Name: Christopher D. Pannacciulli

Title: Senior Vice President

Schedule A

PATENTS

Notice of Grant of Security Interest in Patents
Granted by Pratt & Whitney Rocketdyne, Inc.
In Favor of Wells Fargo Bank, National Association, as Administrative Agent
Recorded June 17, 2013 at Reel 030628 Frame 0408

Issued Patents

Title	Patent No.	Issue Date
SUBSTRATE HAVING LASER SINTERED UNDERPLATE	9346114	05/24/16
SYSTEM FOR BYPASSING AND ISOLATING ELECTRICAL POWER CELLS	9269940	02/23/16
LASER IGNITION FOR LIQUID PROPELLANT ROCKET ENGINE INJECTORS	9255549	02/09/16
SUPERALLOY POWDER, METHOD OF PROCESSING, AND ARTICLE FABRICATED THEREFROM	9206495	12/08/15
THRUST CHAMBER AND ROCKET ENGINE SYSTEM	9151246	10/06/15
BLADE SHROUD FOR FLUID ELEMENT	9022742	05/05/15
SELF RETAINING ANTI-ROTATION KEY	8992149	03/31/15
POWER CONVERTER	8987579	03/24/15
FLUID SEPARATION SYSTEM WITH REDUCED FOULING	8883007	11/11/14
SOLAR RECEIVER	8875510	11/04/14
SOLID STATE HEAT PIPE HEAT REJECTION SYSTEM FOR SPACE POWER SYSTEMS	8859882	10/14/14
METHOD FOR TREATING A POROUS ARTICLE	8858869	10/14/14
CENTER-TAPPED SOLAR ARRAY AND POWER DISTRIBUTION SYSTEM FOR SAME	8836169	09/16/14
APPARATUS FOR ELECTRICAL ISOLATION OF METALLIC HARDWARE	8835762	09/16/14
CHARGE BALANCING TOPOLOGY	8816639	08/26/14
IGNITER/THRUSTER WITH CATALYTIC DECOMPOSITION CHAMBER	8814562	08/26/14
THERMOELECTRIC POWER CONVERTER SUPPORT STRUCTURE	8787516	07/22/14
STRUCTURE HAVING NANOPHASE TITANIUM NODE AND NANOPHASE ALUMINUM STRUTS	8784998	07/22/14
NUCLEAR FUEL	8755483	06/17/14
SEQUENCE DIAGRAM SYSTEM	8731745	05/20/14
LAUNCH ABORT AND ORBITAL MANEUVER SYSTEM	8727283	05/20/14
SCISSOR DUCT FLEX JOINT DAMPER	8696033	04/15/14
FUEL-CRACKING DIESEL ENGINE SYSTEM	8695540	04/15/14
ROTARY ENGINE WITH EXHAUST GAS SUPPLEMENTAL COMPOUNDING	8689764	04/08/14
COOLING DEVICE AND METHOD WITH SYNTHETIC JET ACTUATOR	8584735	11/19/13

OPTICAL POWER CONVERTER	8552356	10/08/13
TUNED DAMPER MEMBER	8544597	10/01/13
HIGH TEMPERATURE STABLE NANOCRYSTALLINE SIGE THERMOELECTRIC MATERIAL	8512667	08/20/13
BRAZED NANO-GRAINED ALUMINUM STRUCTURES	8445115	05/21/13
PIEZO-RESONANCE IGNITER AND IGNITION METHOD FOR PROPELLANT LIQUID ROCKET ENGINE	8438831	05/14/13
METHOD FOR MANUFACTURING A CERAMIC COMPOSITE ARTICLE	8431061	04/30/13
CHARACTERISTIC X-RAY COMPUTED LAMINOGRAPHY SYSTEM FOR HOME MADE EXPLOSIVES (HME) DETECTION	8331525	12/11/12
PANEL ASSEMBLY FOR A SPACE-BASED POWER GENERATION SYSTEM	8308111	11/13/12
A METHOD OF ASSEMBLING A THERMAL EXPANSION COMPENSATOR	8286335	10/16/12
DIFFUSION BONDED COMPOSITE MATERIAL AND METHOD THEREFOR	8225481	07/24/12
FAILURE DETECTION SYSTEM RISK REDUCTION ASSESSMENT	8214317	07/03/12
INJECTOR ASSEMBLY HAVING MULTIPLE MANIFOLDS FOR PROPELLANT DELIVERY	8141339	03/27/12
METHOD OF FABRICATING A ROCKET ENGINE NOZZLE USING PRESSURE BRAZING	8127443	03/06/12
AIRFOIL TIP SHROUD DAMPER	8105039	01/31/12
SPHERICAL FLANGE ASSEMBLY	RE43080 (Reissue of 7380842)	01/10/12
ROCKET ENGINE POWER CYCLE	7997060	08/16/11
LOCKING FASTENING APPARATUS	7922433	04/12/11
GUIDED PROJECTILE	7891298	02/22/11
FUEL CELL INSTRUMENTATION SYSTEM	7826054	11/02/10
EXTENDED RANGE PROJECTILE	7823510	11/02/10
PASSIVE ELECTRICAL COMPONENTS WITH INORGANIC DIELECTRIC COATING LAYER	7786839	08/31/10
ULTRA-COMPACT, HIGH PERFORMANCE AEROVORTICAL ROCKET THRUSTER	7762058	07/27/10
CONSTANT MOMENT TESTING DEVICE FOR ELONGATED MEMBERS	7690265	04/06/10
COMPACT, HIGH PERFORMANCE SWIRL COMBUSTION ROCKET ENGINE	7690192	04/06/10
METHOD OF ANIMATING STRUCTURAL VIBRATION UNDER OPERATIONAL CONDITIONS	7689385	03/30/10
NEUTRON-GAMMA RAY TOMOGRAPHY	7649977	01/19/10
INJECTOR ASSEMBLY HAVING MULTIPLE MANIFOLDS FOR PROPELLANT DELIVERY	7640726	01/05/10
SYSTEM AND METHOD FOR DETECTING ONSET OF STRUCTURAL FAILURE	7623974	11/24/09

THERMAL CYCLE ENGINE WITH AUGMENTED THERMAL ENERGY INPUT AREA	7607299	10/27/09
SOLAR ELECTROLYSIS POWER CO-GENERATION SYSTEM	7605326	10/20/09
DAMPER ROOT RING	7604259	10/20/09
ROCKET ENGINE NOZZLE AND METHOD OF FABRICATING A ROCKET ENGINE NOZZLE USING PRESSURE BRAZING	7596940	10/06/09
BEARING CUP ROTATIONAL LOCK ASSEMBLY	7594760	09/29/09
PIEZO-RESONANCE IGNITER AND IGNITION METHOD FOR PROPELLANT LIQUID ROCKET ENGINE	7565795	07/28/09
FULLY SHIELDED BACKSHELL FOR ELECTRICAL CONNECTOR	7544068	06/09/09
METHOD AND APPARATUS FOR A ROCKET ENGINE POWER CYCLE	7334396	02/26/08
APPARATUS AND METHOD FOR ELECTROPLATING A METALLIC FILM ON A ROCKET ENGINE COMBUSTION CHAMBER COMPONENT	7306710	12/11/07
INLET PARTIAL BLADES FOR STRUCTURAL INTEGRITY AND PERFORMANCE	7273352	09/25/07
SHAFT SEAL ASSEMBLY AND METHOD	7249768	07/31/07
METHOD AND APPARATUS FOR A ROCKET ENGINE POWER CYCLE	7216477	05/15/07
ADVANCED L-CHANNEL WELDED NOZZLE DESIGN	7188417	03/13/07
SPHERICAL FLANGE ASSEMBLY	7144049	12/05/06
DEPLOYABLE ELECTROMAGNETIC CONCENTRATOR	7138960	11/21/06
METHOD AND APPARATUS FOR A SUBSTANTIALLY COAXIAL INJECTOR ELEMENT	7124574	10/24/06
APPARATUS FOR MIXING FLUIDS	7117676	10/10/06
COMBUSTION WAVE IGNITION FOR COMBUSTORS	7111463	09/26/06
INDUCER TIP VORTEX SUPPRESSOR	7097414	08/29/06
METHOD AND APPARATUS FOR SOLAR POWER CONVERSION	7084518	08/01/06
INDUCER WITH SHROUDED ROTOR FOR HIGH SPEED APPLICATIONS	7070388	07/04/06
HIGH SPEED ROTOR ASSEMBLY SHROUD	7066714	06/27/06
ENGINE SPECTROMETER PROBE AND METHOD OF USE	7061607	06/13/06
METHOD AND APPARATUS FOR SOLAR POWER CONVERSION	7026722	04/11/06
THRUSTER DEVICE RESPONSIVE TO SOLAR RADIATION AND ASSOCIATED METHODS	7003941	02/28/06
METHOD AND APPARATUS FOR SOLAR POWER CONVERSION	6979911	12/27/05
COMPACT LIGHTWEIGHT RAMJET ENGINES INCORPORATING SWIRL AUGMENTED COMBUSTION WITH IMPROVED PERFORMANCE	6968695	11/29/05
GASEOUS OXYGEN RESONANCE IGNITER	6966769	11/22/05

SYSTEM AND FABRICATION METHOD FOR ACTIVELY COOLING HIGH PERFORMANCE COMPONENTS	6966176	11/22/05
HIGH TEMPERATURE POWER SUPPLY	6950317	09/27/05
HYPERGOLIC AZIDE FUELS WITH HYDROGEN PEROXIDE	6949152	09/27/05
BI-PROPELLANT INJECTOR WITH FLAME-HOLDING ZONE IGNITER	6918243	07/19/05
TORCH IGNITER	6912857	07/05/05
METHODS AND APPARATUSES FOR REMOVING THERMAL ENERGY FROM A NUCLEAR REACTOR	6888910	05/03/05
HIGH-TEMPERATURE CATALYST FOR CATALYTIC COMBUSTION AND DECOMPOSITION	6887821	05/03/05
TROUGH-STIRLING CONCENTRATED SOLAR POWER SYSTEM	6886339	05/03/05
METHOD FOR FORMING A TUBE-WALLED ARTICLE	6883220	04/26/05
THERMAL CYCLE ENGINE BOOST BRIDGE POWER INTERFACE	6871495	03/29/05
METHOD AND APPARATUS FOR PRODUCING A REFINED GRAIN STRUCTURE	6865919	03/15/05
FLUID INJECTOR AND INJECTION METHOD	6857274	02/22/05
VARIABLE-GRAVITY ANTI-VORTEX AND VAPOR-INGESTION-SUPPRESSION DEVICE	6840275	01/11/05
DESIGN AND ASSEMBLY OF A CATALYST BED GAS GENERATOR FOR THE CATALYTIC DECOMPOSITION OF HIGH CONCENTRATION HYDROGEN PEROXIDE PROPELLANTS AND THE CATALYTIC COMBUSTION OF HYDROCARBON/AIR MIXTURES	6834494	12/28/04
COMPACT, LIGHTWEIGHT HIGH-PERFORMANCE LIFT THRUSTER INCORPORATING SWIRL-AUGMENTED OXIDIZER/FUEL INJECTION, MIXING AND COMBUSTION	6820411	11/23/04
SPLIT BLADE FRICTIONAL DAMPER	6752594	06/22/04
APPARATUS AND METHOD FOR INITIATING A COMBUSTION REACTION WITH SLURRY FUEL	6749726	06/15/04
TORCH IGNITER	6748735	06/15/04
THRUSTER DEVICE RESPONSIVE TO SOLAR RADIATION AND ASSOCIATED METHODS	6745466	06/08/04
METHOD OF GENERATING THRUST AND ELECTRICAL POWER FROM AN OPTICAL SOLAR IMAGE	6742325	06/01/04
DIRECT ILLUMINATION FREE PISTON STIRLING ENGINE SOLAR CAVITY	6735946	05/18/04
DIFFUSER HAVING A VARIABLE BLADE HEIGHT	6695579	02/24/04
COMBUSTION CHAMBER HAVING A MULTIPLE-PIECE LINER AND ASSOCIATED ASSEMBLY METHOD	6688100	02/10/04
TURBINE BLADE ASSEMBLY WITH STRANDED WIRE CABLE DAMPERS	6685435	02/03/04
TURBINE BLADE ASSEMBLY WITH PIN DAMPERS	6676380	01/13/04

COMPOSITE ROTOR HAVING RECESSED RADIAL SPLINES FOR HIGH TORQUE APPLICATIONS	6595751	07/22/03
COMBINED THRUST AND POWER GENERATOR FOR A SATELLITE	6594984	07/22/03
VARIABLE-GRAVITY ANTI-VORTEX AND VAPOR-INGESTION-SUPPRESSION DEVICE	6591867	07/15/03
ROTATING SOLAR CONCENTRATOR	6557804	05/06/03
ARTICLE HAVING DAMPENING MEMBER INSTALLED INTO AN IMBEDDED CAVITY	6547526	04/15/03
ARTICLE HAVING IMBEDDED CAVITY	6482533	11/19/02
HIGH SUCTION PERFORMANCE AND LOW COST INDUCER DESIGN BLADE GEOMETRY	6435829	08/20/02
THRUSTER DEVICE RESPONSIVE TO SOLAR RADIATION AND ASSOCIATED METHODS	6421998	07/23/02
TURBINE BLISK RIM FRICTION FINGER DAMPER	6375428	04/23/02
ANNULAR BEARING WITH DIFFUSER AND INLET FLOW GUIDE	6318896	11/20/01
INTEGRAL PROPULSION AND POWER RADIANT CAVITY RECEIVER	6311476	11/06/01
CONVECTIVE AND TURBULENT SHEAR MIXING INJECTOR	6253539	07/03/01
TIRE TRACK ROUGHENED ORIFICE COMPENSATED HYDROSTATIC BEARING	6056441	05/02/00
HYDROSTATICALLY SUPPORTED FOIL BEARING	5885004	03/23/99

Patent Applications

Title	Appl. No.	Filing Date
CERAMIC ARTICLE AND ADDITIVE PROCESSING METHOD THEREFOR	13475275 20130307201	05/18/12
HIGH TEMPERATURE FLEXIBLE ELECTRODE	12879608 20120060886	09/10/10
METHOD OF PROCESSING A BIMETALLIC PART	12556606 20110058975	09/10/09
LOW VELOCITY INJECTOR MANIFOLD FOR HYPERGOLIC ROCKET ENGINE	12193679 20100037590	08/18/08
RESONANCE DRIVEN GLOW PLUG TORCH IGNITER AND IGNITION METHOD	11756642 20080299504	06/01/07

Notice of Grant of Security Interest in Patents
Granted by Aerojet-General Corporation
In Favor of Wells Fargo Bank, National Association, as Administrative Agent
Recorded June 17, 2013 at Reel 030628 Frame 0319

Issued Patents

Title	Patent No.	Issue Date
NANO-GRAINED ALUMINUM ALLOY BELLOWS	8429894	04/30/13

FASTENER ASSEMBLY FOR CONNECTING ROCKET ENGINE NOZZLES	8281603	10/09/12
CONDUCTIVE EMISSIONS PROTECTION	8242375	08/14/12
RECAST REMOVAL METHOD	8236190	08/07/12
COAXIAL IGNITION ASSEMBLY	8122703	02/28/12
PROPULSION SYSTEM WITH INTEGRATED ROCKET ACCELERATOR	7849670	12/14/10
THREE COMPONENT INJECTOR FOR KEROSENE-OXYGEN ROCKET ENGINE	7685807	03/30/10
HEAT EXCHANGE INJECTOR FOR USE IN A ROCKET ENGINE	7621119	11/24/09
COLD GAS DYNAMIC SPRAYING OF HIGH STRENGTH COPPER	7553385	06/30/09
DUAL-FUNCTION STIRLING ENGINE SYSTEM	7490469	02/17/09
BOOSTER ROCKET ENGINE USING GASEOUS HYDROCARBON IN CATALYTICALLY ENHANCED GAS GENERATOR CYCLE	7389636	06/24/08
ENHANCED PERFORMANCE TORROIDAL COOLANT-COLLECTION MANIFOLD	7373774	05/20/08
ROCKET CHAMBER HEAT EXCHANGER	7370469	05/13/08
ROCKET ENGINE COMBUSTION CHAMBER	7347041	03/25/08
SEMI-AXISYMMETRIC SCRAMJET FLOWPATH WITH CONFORMAL NOZZLE	7328571	02/12/08
METHOD OF ASSEMBLING A ROCKET ENGINE WITH A TRANSITION ZONE BETWEEN THE COMBUSTION CHAMBER AND THE COOLANT SYSTEM	7299551	11/27/07
CRYOGENIC INSULATION	7276290	10/02/07
ENERGETIC DETONATION PROPULSION	7246483	07/24/07
ROCKET ENGINE COMBUSTION CHAMBER	7213392	05/08/07
STAGED EMITTER-ATTRACTOR ION DRIVE	7204078	04/17/07
HIGH TEMPERATURE DYNAMIC SEAL FOR SCRAMJET VARIABLE GEOMETRY	7188477	03/13/07
REDUCED GAIN THRUST CONTROL VALVE	7185675	03/06/07
COOLING SCHEME FOR SCRAMJET VARIABLE GEOMETRY HARDWARE	7117680	10/10/06
ROCKET ENGINE TUBULAR CHAMBER WITH SINGLE PIECE JACKET	7051513	05/30/06
MULTICHANNEL HALL EFFECT THRUSTER	7030576	04/18/06
HEAT EXCHANGER PANEL	6907920	06/21/05
VARIABLE GEOMETRY INLET DESIGN FOR SCRAMJET ENGINE	6883330	04/26/05
HYPERGOLIC FUEL SYSTEM	6807805	10/26/04
CATALYST BED	6652248	11/25/03
METHOD FOR PREPARING REFRACTORY CARBIDES	6627126	09/30/03
GAS GENERATOR FOR PRODUCING ADJUSTABLE FLOW	6532741	03/18/03
METHOD MANUFACTURING SOLID ROCKET MOTORS	6408760	06/25/02

HYDROSTATIC BEARING WITH COMPENSATORY FLUID INJECTION	6053636	04/25/00
APPARATUS FOR PREPARING SPHERICAL ENERGETIC COMPOUNDS	5962803	10/05/99
LIQUID OXYGEN GASIFYING SYSTEM FOR ROCKET ENGINES	5918460	07/06/99
METHOD AND APPARATUS FOR CUTTING BLOCKS OF SOLID ENERGETIC MATERIALS	5881619	03/16/99
ROCKET ENGINE AUXILIARY POWER SYSTEM	5873241	02/23/99
HALL EFFECT PLASMA ACCELERATOR	5847493	12/08/98
HALL EFFECT PLASMA THRUSTER	5845880	12/08/98
PROCESS FOR PREPARING SPHERICAL ENERGETIC COMPOUNDS	5801453	09/01/98
A CLOSED ELECTRON DRIFT HALL EFFECT PLASMA ACCELERATOR WITH ALL MAGNETIC SOURCES LOCATED TO THE REAR OF THE ANODE	5751113	05/12/98

**Notice of Grant of Security Interest in Patents
Granted by Aerojet-General Corporation
In Favor of Wells Fargo Bank, National Association, as Administrative Agent
Recorded January 27, 2012 at Reel 027603 Frame 0556**

Issued Patents

Title	Patent No.	Issue Date
PROPULSION SYSTEM WITH MOVABLE THERMAL CHOKE	8763361	07/01/14
COMBINED CYCLE INTEGRATED COMBUSTOR AND NOZZLE SYSTEM	8701379	04/22/14
HIGH VOLTAGE MULTIPLE PHASE POWER SUPPLY	8572945	11/05/13
CO-SINTERED MULTI-SYSTEM TUNGSTEN ALLOY COMPOSITE	8486541	07/16/13
MULTI-FUNCTIONAL PULSE-DIVIDED ROCKET	8291691	10/23/12
INTEGRATED AIR INLET SYSTEM FOR MULTI-PROPULSION AIRCRAFT ENGINES	RE43731 (Reissue of 7216474)	10/16/12
ROCKET NOZZLES FOR UNCONVENTIONAL VEHICLES	8186145	05/29/12
COMBINED CYCLE MISSILE ENGINE SYSTEM	8056319	11/15/11
PINTLE-CONTROLLED PROPULSION SYSTEM WITH EXTERNAL RING ACTUATOR	8016211	09/13/11
SINGLE PHASE TUNGSTEN ALLOY FOR SHAPED CHARGE LINER	7921778	04/12/11
COMBINED CYCLE INTEGRATED COMBUSTOR AND NOZZLE SYSTEM	7886516	02/15/11
THRUST AUGMENTATION IN PLUG NOZZLES AND EXPANSION-DEFLECTION NOZZLES	7823376	11/02/10
CORE BURNING FOR SCRAMJET ENGINES	7797943	09/21/10
SLOW COOK OFF ROCKET IGNITER	7762195	07/27/10
NOZZLE WITH TEMPERATURE-RESPONSIVE THROAT DIAMETER	7762078	07/27/10

TWO-PIECE AFT CLOSURE FOR A ROCKET MOTOR CASE	7717280	05/18/10
PISTON TANK WITH COMPOUND PISTON FOR HIGH LOADING AND EXPULSION EFFICIENCY	7621429	11/24/09
NOZZLE ASSEMBLY FOR ROCKET AND RAMJET APPLICATIONS	7568348	08/04/09
ROCKET MOTOR CASE USING PLANK SECTIONS AND METHODS OF MANUFACTURING	7484353	02/03/09
HELICON HALL THRUSTER	7436122	10/14/08
SINGLE PHASE TUNGSTEN ALLOY	7360488	04/22/08
INTEGRATED AIR INLET SYSTEM FOR MULTI-PROPULSION AIRCRAFT ENGINES	7216474 (Reissued as RE43731)	05/15/07
HALL EFFECT THRUSTER WITH ANODE HAVING MAGNETIC FIELD BARRIER	7164227	01/16/07
HALL EFFECT THRUSTER WITH ANODE HAVING MAGNETIC FIELD BARRIER	6982520	01/03/06
EXPANDER CYCLE ROCKET ENGINE WITH STAGED COMBUSTION AND HEAT EXCHANGE	6832471	12/21/04
SOLID PROPELLANT FORMULATIONS AND METHODS AND DEVICES EMPLOYING THE SAME FOR THE DESTRUCTION OF AIRBORNE BIOLOGICAL AND/OR CHEMICAL AGENTS	6808572	10/26/04
NOZZLE WITH SPIRAL INTERNAL COOLING CHANNELS	6802179	10/12/04
DIVERSION OF COMBUSTION GAS WITHIN A ROCKET ENGINE TO PREHEAT FUEL	6799417	10/05/04
AXIAL FLOW CATALYST PACK	6746651	06/08/04
COMBUSTIBLE COMPOSITIONS FOR AIR-AUGMENTED ROCKET ENGINES	6736912	05/18/04
UNIFORM GAS DISTRIBUTION IN ION ACCELERATORS WITH CLOSED ELECTRON DRIFT	6612105	09/02/03
HIGH PERFORMANCE ROCKET ENGINE HAVING A STEPPED EXPANSION COMBUSTION CHAMBER AND METHOD OF MAKING THE SAME	6588199	07/08/03
ROCKET VEHICLE THRUST AUGMENTATION WITHIN DIVERGENT SECTION OF NOZZLE	6568171	05/27/03
SOLID ROCKET MOTOR BOLTED THRUST TAKEOUT STRUCTURE	6547182	04/15/03
APPARATUS TO SEPARATE GAS FROM A LIQUID FLOW	6432178	08/13/02
HIGH PERFORMANCE ROCKET ENGINE HAVING A STEPPED EXPANSION COMBUSTION CHAMBER AND METHOD OF MAKING THE SAME	6397580	06/04/02
APPARATUS TO SEPARATE GAS FROM A LIQUID FLOW	6342092	01/29/02
MULTISTAGE ION ACCELERATORS WITH CLOSED ELECTRON DRIFT	6215124	04/10/01
MAGNETIC FLUX SHAPING IN ION ACCELERATORS WITH CLOSED ELECTRON DRIFT	6208080	03/27/01
THREE AXIS THRUSTER	6173565	01/16/01

ROCKET ENGINE WITH ONE-PIECE COMBUSTION CHAMBER STEP STRUCTURE, AND ITS FABRICATION	6079101	06/27/00
METHOD AND APPARATUS FOR SELECTIVELY DISTRIBUTING POWER IN A THRUSTER SYSTEM	6031334	02/29/00
CHEMICALLY ACTIVE FIRE SUPPRESSION COMPOSITION	6024889	02/15/00
CASTABLE DOUBLE BASE SOLID ROCKET PROPELLANT CONTAINING BALLISTIC MODIFIER PASTED IN AN INERT POLYMER	6024810	02/15/00
APPARATUS AND METHOD FOR SIMULATING ROCKET-TO-RAMJET TRANSITION IN A PROPULSION SYSTEM	5831155	11/03/98
ROCKET-RAMJET ENGINE CASING PORT CLOSURE	5784877	07/28/98
METHOD OF INDUCTIVE BONDING SINTERED COMPACTS OF HEAVY ALLOYS	5760378	06/02/98

Patent Applications

Title	Appl. No.	Filing Date
CATALYST, GAS GENERATOR, AND THRUSTER WITH IMPROVED THERMAL CAPABILITY AND CORROSION RESISTANCE	13151155 20120304620	06/01/11
CO-SINTERED MULTI-SYSTEM TUNGSTEN ALLOY COMPOSITE	12952426 20110064600	11/23/10

Notice of Grant of Security Interest in Patents

Granted by Arde, Inc.

In Favor of Wells Fargo Bank, National Association, as Administrative Agent

Recorded June 17, 2013 at Reel 030628 Frame 0871

Issued Patents

Title	Patent No.	Issue Date
MULTILAYER COMPOSITE PRESSURE VESSEL AND METHOD FOR MAKING THE SAME	8481136	07/09/13
METHOD FOR MAKING A MULTILAYER COMPOSITE PRESSURE VESSEL	7497919	03/03/09

Notice of Grant of Security Interest in Patents

Granted by Aerojet-General Corporation

In Favor of Wachovia Bank, National Association, as Administrative Agent

Recorded August 17, 2007 at Reel 019714 Frame 0101

Issued Patent

Title	Patent No.	Issue Date
SOLID PROPELLANT FORMULATIONS AND METHODS AND DEVICES EMPLOYING THE SAME FOR THE DESTRUCTION OF AIRBORNE BIOLOGICAL AND/OR CHEMICAL AGENTS	6808572	10/26/04

**Notice of Grant of Security Interest in Patents
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In Favor of Wachovia Bank, National Association, as Administrative Agent
Recorded June 29, 2007 at Reel 019489 Frame 0766**

Issued Patents

Title	Patent No.	Issue Date
THRUST AUGMENTATION IN PLUG NOZZLES AND EXPANSION-DEFLECTION NOZZLES	7823376	11/02/10
NOZZLE ASSEMBLY FOR ROCKET AND RAMJET APPLICATIONS	7568348	08/04/09
HALL EFFECT THRUSTER WITH ANODE HAVING MAGNETIC FIELD BARRIER	7164227	01/16/07

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Recorded May 21, 2007 at Reel 019317 Frame 0223**

Issued Patent

Title	Patent No.	Issue Date
ROCKET ENGINE WITH ONE-PIECE COMBUSTION CHAMBER STEP STRUCTURE, AND ITS FABRICATION	6079101	06/27/00

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Recorded March 14, 2005 at Reel 015766 Frame 0560**

Issued Patents

Title	Patent No.	Issue Date
INTEGRATED AIR INLET SYSTEM FOR MULTI-PROPULSION AIRCRAFT ENGINES	RE43731 (Reissue of 7216474)	10/16/12
SINGLE PHASE TUNGSTEN ALLOY	7360488	04/22/08
INTEGRATED AIR INLET SYSTEM FOR MULTI-PROPULSION AIRCRAFT ENGINES	7216474 (Reissued as RE43731)	05/15/07
HALL EFFECT THRUSTER WITH ANODE HAVING MAGNETIC FIELD BARRIER	6982520	01/03/06
EXPANDER CYCLE ROCKET ENGINE WITH STAGED COMBUSTION AND HEAT EXCHANGE	6832471	12/21/04
SOLID PROPELLANT FORMULATIONS AND METHODS AND DEVICES EMPLOYING THE SAME FOR THE DESTRUCTION OF AIRBORNE BIOLOGICAL AND/OR CHEMICAL AGENTS	6808572	10/26/04
NOZZLE WITH SPIRAL INTERNAL COOLING CHANNELS	6802179	10/12/04

DIVERSION OF COMBUSTION GAS WITHIN A ROCKET ENGINE TO PREHEAT FUEL	6799417	10/05/04
AXIAL FLOW CATALYST PACK	6746651	06/08/04
COMBUSTIBLE COMPOSITIONS FOR AIR-AUGMENTED ROCKET ENGINES	6736912	05/18/04
UNIFORM GAS DISTRIBUTION IN ION ACCELERATORS WITH CLOSED ELECTRON DRIFT	6612105	09/02/03
HIGH PERFORMANCE ROCKET ENGINE HAVING A STEPPED EXPANSION COMBUSTION CHAMBER AND METHOD OF MAKING THE SAME	6588199	07/08/03
ROCKET VEHICLE THRUST AUGMENTATION WITHIN DIVERGENT SECTION OF NOZZLE	6568171	05/27/03
SOLID ROCKET MOTOR BOLTED THRUST TAKEOUT STRUCTURE	6547182	04/15/03
APPARATUS TO SEPARATE GAS FROM A LIQUID FLOW	6432178	08/13/02
HIGH PERFORMANCE ROCKET ENGINE HAVING A STEPPED EXPANSION COMBUSTION CHAMBER AND METHOD OF MAKING THE SAME	6397580	06/04/02
APPARATUS TO SEPARATE GAS FROM A LIQUID FLOW	6342092	01/29/02
MULTISTAGE ION ACCELERATORS WITH CLOSED ELECTRON DRIFT	6215124	04/10/01
MAGNETIC FLUX SHAPING IN ION ACCELERATORS WITH CLOSED ELECTRON DRIFT	6208080	03/27/01
THREE AXIS THRUSTER	6173565	01/16/01
METHOD AND APPARATUS FOR SELECTIVELY DISTRIBUTING POWER IN A THRUSTER SYSTEM	6031334	02/29/00
CHEMICALLY ACTIVE FIRE SUPPRESSION COMPOSITION	6024889	02/15/00
CASTABLE DOUBLE BASE SOLID ROCKET PROPELLANT CONTAINING BALLISTIC MODIFIER PASTED IN AN INERT POLYMER	6024810	02/15/00
APPARATUS AND METHOD FOR SIMULATING ROCKET-TO-RAMJET TRANSITION IN A PROPULSION SYSTEM	5831155	11/03/98
ROCKET-RAMJET ENGINE CASING PORT CLOSURE	5784877	07/28/98
METHOD OF INDUCTIVE BONDING SINTERED COMPACTS OF HEAVY ALLOYS	5760378	06/02/98

TRADEMARKS

**Notice of Grant of Security Interest in Trademarks
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Recorded June 17, 2013 at Reel 5049 Frame 0370**

Trademark Registration

Mark	Reg. No.	Reg. Date
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ROCKETDYNE	2364319	07/04/00
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**Notice of Grant of Security Interest in Trademarks
Granted by Aerojet-General Corporation
In Favor of Wells Fargo Bank, National Association, as Administrative Agent
Recorded November 22, 2011 at Reel 4665 Frame 0132**

Trademark Registrations

Mark	Reg. No.	Reg. Date
ARCITE	0699654	06/21/60
AEROJET	0426781	01/14/47

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Recorded March 14, 2005 at Reel 3046 Frame 0200**

Trademark Registrations

Mark	Reg. No.	Reg. Date
ARCITE	0699654	06/21/60
AEROJET	0426781	01/14/47

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Recorded March 18, 2005 at Volume 3522 Doc. No. 557**

Copyright Registrations

Title	Reg. No.	Reg. Date
Product-focused visual information pull system	TX5183745	03/20/00
Contemporary art at Aerojet-General: a sampling	VA39446	12/05/79
Welcome to Sacramento and the Aerojet Liquid Rocket Company	TX660239	03/26/81
Aerojet marine systems	TX323230	09/04/79
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3581396	03/20/93
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3450265	10/23/92
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3478281	01/25/93
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3388781	04/20/92
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3216891	12/26/91

C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3084574	04/23/91
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX3185536	09/09/91
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2995389	01/14/91
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2871201	07/02/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2890212	08/15/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2726632	01/12/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2726634	01/12/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2726636	01/12/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2726633	01/12/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2726635	01/12/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2812297	03/30/90
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX2125583	08/03/87
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1970809	12/15/86
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C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1898963	08/25/86
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1791348	03/28/86
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1591886	05/31/85
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1664180	09/27/85
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1699387	11/21/85
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1468987	12/06/84
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1531197	03/01/85
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C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1416547	08/27/84
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1242407	12/02/83
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C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1134464	06/10/83
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1189505	09/19/83
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1103512	02/22/83
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1094620	04/04/83
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1094621	04/04/83
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1017233	11/01/82
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX1008424	11/08/82
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C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX541103	09/05/80
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C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX430633	03/10/80
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX487767	06/09/80
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX280753	07/02/79
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX326046	09/07/79
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX381655	12/17/79
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX202399	12/11/78
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX207256	03/14/79
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX105155	09/11/78
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX14532	03/22/78
C A S E register: coordinating agency for supplier evaluation : register of quality control evaluated suppliers	TX49728	06/05/78

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Recorded March 21, 2005 at Volume 3522 Doc. No. 242**

Copyright Registrations

Title	Reg. No.	Reg. Date
Unit cell control software	TXu533682	12/16/91
Computerized exothermic reaction tester	TXu516036	12/23/91
RCRA permit exemptions for on-site storage	TX3317415	05/14/92
Press concepts: a self-study course	TX2844699	06/04/90
GenCorp SERIAL: 1 work(s)	TX3367786	08/03/92
GenCorp ... report ... SERIAL: 1 work(s)	TX3310728	05/18/92
GenCorp ... annual report. SERIAL: 1 work(s)	TX3325270	03/30/92