

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7563553

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS

CONVEYING PARTY DATA

Name	Execution Date
AEROJET ROCKETDYNE, INC.	06/17/2016

RECEIVING PARTY DATA

Name:	BANK OF AMERICA, N.A., AS ADMINISTRATIVE AGENT
Street Address:	900 W. TRADE STREET, 6TH FLOOR
Internal Address:	MAIL CODE: NC1-026-06-03
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255-0001

PROPERTY NUMBERS Total: 27

Property Type	Number
Patent Number:	11333074
Patent Number:	11239745
Patent Number:	11236764
Patent Number:	11181077
Patent Number:	11162988
Patent Number:	11002224
Patent Number:	10975805
Application Number:	17792226
Application Number:	17782772
Application Number:	17775237
Application Number:	17771237
Application Number:	17770156
Application Number:	17641961
Application Number:	17442442
Application Number:	17442434
Application Number:	17311411
Application Number:	17286623
Application Number:	17282395
Application Number:	16771026

PATENT

Property Type	Number
Application Number:	16316685
PCT Number:	US2022027569
PCT Number:	US2021050409
PCT Number:	US2020063919
PCT Number:	US2020057602
PCT Number:	US2020041480
PCT Number:	US2020041378
PCT Number:	US2020029762

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 017625.004996

NAME OF SUBMITTER: JOHN SLAUGHTER

SIGNATURE: /john slaughter/

DATE SIGNED: 09/28/2022

Total Attachments: 5

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NOTICE OF GRANT OF SECURITY INTEREST IN PATENTS

United States Patent and Trademark Office

Ladies and Gentlemen:

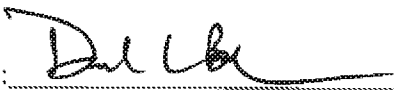
Please be advised that pursuant to the Fourth Amended and Restated Security Agreement dated as of June 17, 2016 (as the same may be amended, modified, restated or supplemented from time to time, the "Security Agreement") by and among the Grantors from time to time party thereto (each a "Grantor" and collectively, the "Grantors") and Bank of America, N.A., as Administrative Agent (the "Administrative Agent") for the Secured Parties referenced therein, the undersigned Grantor has granted a continuing security interest in and a right to set off against the patents and patent applications shown on Schedule 1 to the Administrative Agent for the ratable benefit of the Secured Parties.

[Signature pages follow]

The undersigned Grantor and the Administrative Agent, on behalf of the Secured Parties, hereby acknowledge and agree that the security interest in the foregoing patents and patent applications (i) may only be terminated in accordance with the terms of the Security Agreement and (ii) is not to be construed as an assignment of any patent or patent application.

Very truly yours,

AEROJET ROCKETDYNE, INC.,
an Ohio corporation


By: 

Name: Daniel L. Boehle

Title: Vice President and Chief Financial Officer

Acknowledged and Accepted:

BANK OF AMERICA, N.A.,
as Administrative Agent

By: 
Name: Kyle D Harding
Title: Vice President

PATENT NOTICE
AEROJET ROCKETDYNE, INC.

PATENT
REEL: 061561 FRAME: 0455

Schedule 1

**Aerojet Rocketdyne, Inc.
(Ohio Corporation)**

Issued Patents

Title	Patent No.	Issue Date
LIQUID PROPELLANT ROCKET ENGINE TURBOPUMP DRAIN	11333074	05/17/2022
POWER CONVERTER INCLUDING A RECIRCULATING SNUBBER	11239745	02/01/2022
PUMP WITH HOUSING HAVING INTERNAL GROOVES	11236764	02/01/2022
COPPER COMBUSTION CHAMBER ATTACHED TO INJECTOR BY NON-COPPER WELD TRANSITION RING	11181077	11/23/2021
LOAD IMPEDANCE TESTER AND MEASUREMENT METHOD	11162988	11/02/2021
BOOST TURBO-PUMP WITH AXIALLY FED TURBINE	11002224	05/11/2021
GROUND HYDRAULIC SYSTEM HYPERGOLIC SLUG INJECTION	10975805	04/13/2021

Patent Applications

Title	Appl. No.	Filing Date
PUSH PULL TI THRUSTER VALVE	PCT/US2022/0275 69	05/04/2022
DYNAMIC QUICK CONNECTOR COUPLING	PCT/US2021/0504 09	09/15/2021
INDUCTOR FOR H BRIDGE PROTECTION	PCT/US2020/0639 19	12/10/2020
PARAFFIN ACTUATOR AND BURST DISK PROPELLANT ISOLATION	PCT/US2020/0576 02	10/28/2020
XTSU REDUNDANCY UNIT CONNECTING 2 PPUS TO DRIVE 4 THRUSTERS	PCT/US2020/4148 0	07/10/2020
TIE BOLT MAGNETIC DRIVEN CRYO PUMP	PCT/US2020/4137 8	07/09/2020
BALL BEARING RETENTION MECHANISM	PCT/US2020/2976 2	04/24/2020
PRIMARY OVERCURRENT CIRCUIT (POC) - PROTECTION AGAINST RADIATION INDUCED SHOOT-THROUGH DAMAGE TO POWER MOSFETS (US GOV)	17792226	02/19/2020
ARITCLE WITH 2D AND 3D FIBER STRUCTURE	17782772	02/20/2020
AXIAL FLUX MOTOR WITH COOLING JACKET	17775237	05/06/2022
THRUSTER NOZZLE ASSEMBLY WITH FLOW REGULATOR IN THROAT AREA AND ROTARY JOINT	17771237	04/22/2022
VALVE TIMING SYSTEM FOR LIQUID FUEL ROCKETS	17770156	04/19/2022
CATALYTIC THRUSTER	17641961	03/10/2022

RECONFIGURABLE POWER PROCESSING UNIT FOR SPACECRAFT OPERATIONS	17442442 20220194634	09/23/2021
ELECTRIC PROPULSION SYSTEM INCLUDING HEATERLESS DISPENSER CATHODE	17442434 20220165533	09/23/2021
REDUCED VAPOR-TOXICITY HYDRAZINE COMPOSITION	17311411 20220024836	06/07/2021
INJECTOR WITH INJECTOR ELEMENTS IN CIRCUMFERENTIAL ROWS THAT ALTERNATE BETWEEN COUNTER-CLOCKWISE AND CLOCKWISE SWIRL	17286623 20210363940	04/19/2021
PUMP WITH AXIALLY-ELONGATED ANNULAR SEAL ELEMENT BETWEEN INDUCER AND IMPELLER	17282395 20210340989	04/02/2021
HALL THRUSTER WITH ANNULAR CATHODE	16771026 20210164453	06/09/2020
INJECTOR ELEMENT FOR ROCKET ENGINE	16316685 20190153980	01/10/2019

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RECORDED: 09/28/2022

**PATENT
REEL: 061561 FRAME: 0457**