PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4722089

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST	

CONVEYING PARTY DATA

Name	Execution Date
JPMORGAN CHASE BANK, N.A., AS COLLATERAL AGENT	11/22/2017

RECEIVING PARTY DATA

Name:	HUNTINGTON INGALLS INCORPORATED (F/K/A NORTHROP GRUMMAN SHIPBUILDING, INC.)
Street Address:	4101 WASHINGTON AVENUE
City:	NEWPORT NEWS
State/Country:	VIRGINIA
Postal Code:	23607

PROPERTY NUMBERS Total: 19

Property Type	Number
Patent Number:	8330286
Patent Number:	8446027
Application Number:	13953981
Application Number:	13954014
Application Number:	14210650
Application Number:	14210601
Application Number:	14210730
Application Number:	14211311
Application Number:	62025041
Application Number:	62070268
Application Number:	62036762
Application Number:	14476181
Application Number:	62053293
Application Number:	14487688
Application Number:	62071708
Application Number:	14638538
Application Number:	14686427
Application Number:	14695636
Application Number:	14729561

PATENT REEL: 044325 FRAME: 0332

504675367

CORRESPONDENCE DATA

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Address Line 2: COGENCY GLOBAL INC.

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	F174193 PAT HI 3
NAME OF SUBMITTER:	SONYA JACKMAN
SIGNATURE:	/Sonya Jackman/
DATE SIGNED:	12/07/2017

Total Attachments: 7

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PATENT REEL: 044325 FRAME: 0333

Release of Security Interest in Patent Rights

THIS RELEASE OF SECURITY INTEREST IN PATENT RIGHTS (this "Release") is entered into as of November 22, 2017 by and among Huntington Ingalls Incorporated (f/k/a Northrop Grumman Shipbuilding, Inc.), a Virginia Corporation (the "Assignor"), and JPMorgan Chase Bank, N.A., as collateral agent (the "Agent" or the "Assignee") for the lenders party to Second Amended and Restated Credit Agreement dated as of July 13, 2015 among Huntington Ingalls Industries, Inc. (the "Borrower"), the lenders party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent (as further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement");.

WHEREAS, pursuant to the terms and conditions of that certain Amended and Restated Security Agreement dated as of July 13, 2015 by and among the Borrower, the Guarantors (as defined therein), and JPMorgan Chase Bank, N.A., as collateral agent (as further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), the Assignor (or the relevant predecessor in interest, as applicable) granted to the Assignee a continuing security interest in and lien on all of their right, title and interest in and to the Patent Collateral (as defined in each of the Patent Security Agreement (as defined below));

WHEREAS, reference is made to that Patent Security Agreement dated as of July 13, 2015 (as amended, restated, amended and restated, supplemented or otherwise modified immediately prior to the date hereof, the "Patent Security Agreement"), which granted to the Assignee for the benefit of the Secured Parties a continuing security interest in all of the right, title and interest of the Assignor (or the relevant predecessor in interest, as applicable) in and to the Patent Collateral, including, without limitation, each Patent registration and application referred to in Schedule A hereto;

WHEREAS, the Patent Security Agreement was recorded with the United States Patent and Trademark Office (the "**USPTO**") on reel 036099 frame 0065;

WHEREAS, the Agent has agreed to terminate and release its security interest in and lien on the Patent Collateral.

- **NOW**, **THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:
- Section 1. Release of Security Interest in Patent Collateral. (a) The Agent hereby terminates the Patent Security Agreement and hereby cancels, re-pledges, reassigns and releases any and all security interests it has against the Patent Collateral.
- (b) If and to the extent the Agent has acquired any right, title or interest in, to or under any of the Patent Collateral, the Agent hereby assigns, transfers, conveys and delivers such right, title or interest to the Assignor.
- (c) The Agent hereby agrees, at the expense of the Assignor, to execute and deliver to the Assignor such additional documents, instruments and certificates, and take

#90302194v2 #90302194v4 such other actions, as the Assignor shall reasonably request to evidence the termination of the Agent's lien on, and the release of, the Patent Collateral.

- Section 2. *Recordation of Release*. The Agent hereby authorizes and requests that the Commissioner for Patents in the USPTO, and any other necessary United States government officer, record this Release; it being understood that such recordation shall be at the Assignor's sole expense.
- Section 3. *Counterparts*. This Release may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute one and the same agreement.
- Section 4. *Governing Law*. This Release shall be governed by and construed in accordance with the laws of the State of New York.

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IN WITNESS WHEREOF, the Agent has caused this Release to be executed by its duly authorized representative:

> JPMORGAN CHASE BANK, N.A., as Collateral Agent

By: Karan P. Kellas Title: Executive Director

ACCEPTED AND ACKNOWLEDGED BY:

HUNTINGTON INGALLS INCORPORATED

Ву:

Name: D. R. Wyatt Title: Treasurer

[Signature Page to Patent Release]

SCHEDULE 1

UNITED STATES PATENTS AND DESIGN PATENT

Patent No.	Country	Issued	Expiration	Title
Appln. No.	US		8/20/2029	
13/493,385				
Patent No. 8,330,286				
Appln. No.	US		8/20/2029	
13/709,150				
Patent No. 8,446,027				

UNITED STATES PATENT APPLICATIONS

Registered Owner	Patent/Application Number	Country of Registrati	Expiration Date
Huntington Ingalls Incorporated	Appln. No. 10747360.5	EP	
Huntington Ingalls Incorporated	Appln. No. 13/953,981	US	
Huntington Ingalls Incorporated	Appln. 13/954,014	US	
Huntington Ingalls Incorporated	Appln. No. 14/210,650	US	
Huntington Ingalls Incorporated	Appln. No. 14/210,601	US	
Huntington Ingalls Incorporated	Appln. No. 14/210,730	US	
Huntington Ingalls Incorporated	Appln. No. 14/211,311	US	
Huntington Ingalls Incorporated	Appln. No. PCT/US14/27283	WO	
Huntington Ingalls Incorporated	Appln. No. PCT/US14/27333	WO	
Huntington Ingalls Incorporated	Appln No. PCT/US14/27396	WO	

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Registered Owner	Patent/Application Number	Country of Registrati	Expiration Date
Huntington Ingalls Incorporated	Appln. No. 62/025,041	US	
Huntington Ingalls Incorporated	Appln. No. 62/070,268	US	
Huntington Ingalls Incorporated	Appln. No. 62/036,762	US	
Huntington Ingalls Incorporated	Appln. No. 14/476,181	US	
Huntington Ingalls Incorporated	Appln. No. 62/053,293	US	
Huntington Ingalls Incorporated	Appln. No. 14/487,688	US	
Huntington Ingalls Incorporated	Appln. No. PCT/US14/53993	WO	
Huntington Ingalls Incorporated	Appln. No. PCT/US14/55865	WO	
Huntington Ingalls Incorporated	Appln. No. 62/071,708	US	
Huntington Ingalls Incorporated	Appln. No. 14/638,538	US	
Huntington Ingalls Incorporated	Appln. No. PCT/US15/18749	WO	
Huntington Ingalls Incorporated	Appln. No. 14/686,427	US	
Huntington Ingalls Incorporated	Appln. No. PCT/US15/25784	WO	
Huntington Ingalls Incorporated	Appln. No. 14/695,636	US	

Registered Owner	Patent/Application Number	Country of Registrati	Expiration Date
Huntington Ingalls Incorporated	Appln. No. PCT/US15/27534	WO	
Huntington Ingalls Incorporated	Appln. No. 14/729,561	US	
Huntington Ingalls Incorporated	Appln No. PCT/US15/33972	WO	

PATENT LICENSES

None.

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