

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5537992

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ATTACHED DOCUMENT previously recorded on Reel 049218 Frame 0441. Assignor(s) hereby confirms the SECURITY AGREEMENT.

CONVEYING PARTY DATA

Name	Execution Date
DELCATH SYSTEMS, INC.	04/18/2019
DECALTH HOLDINGS LIMITED	04/18/2019
DELCATH SYSTEMS LIMITED	04/18/2019
DELCATH SYSTEMS UK LIMITED	04/18/2019
DELCATH SYSTEMS GMBH	04/18/2019
DELCATH SYSTEMS B .V.	04/18/2019

RECEIVING PARTY DATA

Name:	ROSALIND MASTER FUND LP
Street Address:	175 BLOOR STREET EAST
Internal Address:	SUITE 1316 NORTH TOWER
City:	TORONTO
State/Country:	CANADA
Postal Code:	M4W 3R8

PROPERTY NUMBERS Total: 15

Property Type	Number
Patent Number:	7022097
Patent Number:	9707331
Patent Number:	D708749
Patent Number:	9314561
Patent Number:	9541544
Patent Number:	8679057
Patent Number:	9265914
Patent Number:	9108029
Patent Number:	9814823
Application Number:	15651141
Application Number:	15071896
Application Number:	15346239
Application Number:	14995677

PATENT

Property Type	Number
Application Number:	14797108
Application Number:	15728296

CORRESPONDENCE DATA

Fax Number:

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.

Phone: 2126553320
Email: pwright@chapman.com
Correspondent Name: CHAPMAN AND CUTLER LLP
Address Line 1: 1270 AVENUE OF THE AMERICAS, 30TH FLOOR
Address Line 2: ATTN: PATRICIA A. WRIGHT
Address Line 4: NEW YORK, NEW YORK 10020

NAME OF SUBMITTER:	PATRICIA A. WRIGHT
SIGNATURE:	/Patricia A. Wright/
DATE SIGNED:	05/23/2019

Total Attachments: 66

source=Delcath - Patent IP Security Agreement (04.18.2019)#page1.tif
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RECORDATION FORM COVER SHEET

PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Delcath Systems, Inc.

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) April 18, 2019

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☒ Other Correction within the document

2. Name and address of receiving party(ies)

Name: Rosalind Master Fund LP

Internal Address: _____

Street Address: 175 Bloor Street East
Suite 1316 North Tower

City: Toronto

State: Ontario

Country: Canada Zip: M4W 3R8

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

B. Patent No.(s)

See Schedule 1 attached to the Intellectual
Property Security Agreement

See Schedule 1 attached to the Intellectual
Property Security Agreement

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence
concerning document should be mailed:

Name: Chapman and Cutler LLP

Internal Address: Attn: Patricia Wright

Street Address: 1270 Avenue of the Americas

City: New York

State: New York Zip: 10020

Phone Number: (212) 655-3320

Docket Number: _____

Email Address: pwright@chapman.com

6. Total number of applications and patents
involved: 15

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

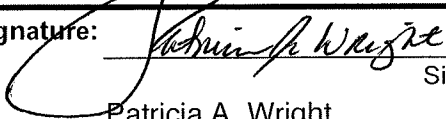
- ☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized UserName _____

9. Signature:



Signature

05/22/2019

Date

Patricia A. Wright

Name of Person Signing

Total number of pages including cover
sheet, attachments, and documents:

45

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

ADDITIONAL NAMES OF CONVEYING PARTIES

<u>PARTY NAME</u>	<u>ORGINATIONAL TYPE</u>	<u>INCORPORATION OF FOREIGN LLC</u>
Decalth Holdings Limited	LLC	Ireland
Delcath Systems Limited	LLC	Ireland
Delcath Systems UK Limited	LLC	United Kingdom
Delcath Systems GMBH	LLC	Germany
Delcath Systems B.V.	LLC	Netherlands

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (this "**Agreement**"), dated as of April 18, 2019, by Delcath Systems, Inc., a Delaware corporation on behalf of itself and each of its Subsidiaries and each of its Subsidiaries listed on the signature page hereto (collectively, the "**Grantor**"), in favor of the holders of the Company's 8% Secured Promissory Notes identified on the signature pages hereto, and their endorsees, transferees and assigns, as secured lenders (each, a "**Secured Lender**" and collectively, the "**Secured Lenders**").

WHEREAS:

A. Reference is made to that certain Security Agreement (the "**Security Agreement**"), entered into by and among the Grantor, the other "Guarantors" party thereto, and the Secured Lenders, which secures certain now existing and future arising obligations owing to the Secured Lender (as defined in the Security Agreement) under the Transaction Documents (as defined in the Purchase Agreement (as defined below)), as provided in the Security Agreement;

B. Pursuant to the Security Agreement and that certain Securities Purchase Agreement (the "**Purchase Agreement**"), entered into between the Grantor and Secured Lender, the Grantor is required to execute and deliver to the Secured Lender this Agreement;

C. Pursuant to the terms of the Security Agreement, the Grantor has granted to the Secured Lender (as defined in the Security Agreement), a security interest in substantially all the assets of the Grantor, including all right, title and interest of the Grantor in, the IP Collateral (as defined below); and

D. Capitalized terms used and not otherwise defined herein that are defined in the Security Agreement or the Purchase Agreement shall have the meanings given such terms in the Security Agreement or the Purchase Agreement.

NOW, THEREFORE, in consideration of the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby grants to the Secured Lender, to secure the Obligations (as defined in the Security Agreement), a continuing security interest in all of the Grantor's right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired:

1. Each United States and foreign trademark and trademark application, including, without limitation, each United States federally registered trademark and trademark application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

2. Each trademark license, including, without limitation, each trademark license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

3. All products and proceeds of the foregoing items 1 through 2, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement,

misappropriation, dilution, violation or other impairment of any trademark, including, without limitation, any trademark referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a trademark application referred to in Schedule 1 and any trademark licensed under any trademark license listed on Schedule 1 annexed hereto (items 1 through 3 being herein collectively referred to as the "**Trademark Collateral**");

4. Each United States and foreign patent and patent application, including, without limitation, each United States federally registered patent and patent application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

5. Each patent license, including, without limitation, each patent license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

6. All products and proceeds of the foregoing items 4 through 5, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any patent, including, without limitation, any patent referred to in Schedule 1 annexed hereto, any trademark-issued pursuant to a patent application referred to in Schedule 1 and any patent licensed under any patent license listed on Schedule 1 annexed hereto (items 4 through 6 being herein collectively referred to as the "**Patent Collateral**");

7. If applicable, each United States and foreign copyright and copyright application, including, without limitation, each United States federally registered copyright and copyright application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

8. If applicable, each copyright license, including, without limitation, each copyright license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

9. All products and proceeds of the foregoing items 7 through 8, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any copyright, including, without limitation, any copyright referred to in Schedule 1 annexed hereto, any copyright issued pursuant to a copyright application referred to in Schedule 1 and any copyright licensed under any copyright license listed on Schedule 1 annexed hereto (items 7 through 9 being herein collectively referred to as the "**Copyright Collateral**"; items 1 through 9 being herein (i.e., the Trademark Collateral, the Patent Collateral, and the Copyright Collateral) collectively referred to as the "**IP Collateral**").

10. This security interest is granted in conjunction with the security interests granted to the Secured Lender, pursuant to the Security Agreement and the other Transaction Documents (as defined in the Purchase Agreement). The Grantor hereby acknowledges and affirms that the rights and remedies of the Secured Lender with respect to the security interest in the IP Collateral made and granted hereby are more fully set forth in the Transaction Documents (as defined in the Purchase Agreement), the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Capitalized terms used but not defined herein have the respective

meanings ascribed thereto in the Transaction Documents (as defined in the Purchase Agreement).

11. Grantor shall give Secured Lender prior written notice of no less than five (5) Business Days before filing any additional application for registration of any trademark and prompt notice in writing of any additional trademark registrations, patent registration, or copyright registrations granted therefor after the date hereof. Without limiting Grantor's obligations under this paragraph, Grantor hereby authorizes Secured Lender unilaterally to modify this Agreement by amending Schedule 1 to include any future United States registered trademarks, patents, copyrights or applications therefor of Grantor. Notwithstanding the foregoing, no failure to so modify this Agreement or amend Schedule 1 shall in any way affect, invalidate or detract from Secured Lender's continuing security interest in all Collateral, whether or not listed on Schedule 1.

12. Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their trademarks subject to the security interest hereunder.

13. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

14. This Agreement is a Transaction Document (as defined in the Purchase Agreement).

15. This Agreement shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Agreement and all disputes arising hereunder shall be governed by, the laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The parties hereto (a) agree that any legal action or proceeding with respect to this Agreement or any other agreement, document, or other instrument executed in connection herewith or therewith, shall be brought in any state or federal court located within the City of New York, New York, (b) irrevocably waive any objections which either may now or hereafter have to the venue of any suit, action or proceeding arising out of or relating to this Agreement, or any other agreement, document, or other instrument executed in connection herewith, brought in the aforementioned courts and (c) further irrevocably waive any claim that any such suit, action, or proceeding brought in any such court has been brought in an inconvenient forum.

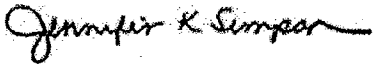
16. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Debtors and the Secured Lenders holding at least 50.1% in interest of the Notes, then outstanding, provided that if any modification, amendment or termination disproportionately and adversely impacts a Secured Lender (or group of Secured Lenders), the consent of such disproportionately impacted

Secured Lender (or group of Secured Lenders) shall also be required, or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought.

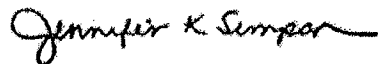
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The Grantor has caused this Intellectual Property Security Agreement to be duly executed by its duly authorized officer thereunto as of the date first set forth above.

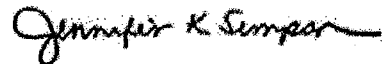
DELCATH SYSTEMS, INC.

By: 
Name: Jennifer K. Simpson
Title: President & CEO

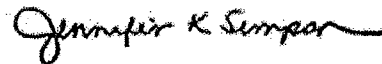
DELCATH HOLDINGS LIMITED

By: 
Name: Jennifer K. Simpson
Title: Director

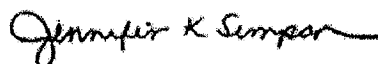
DELCATH SYSTEMS LIMITED

By: 
Name: Jennifer K. Simpson
Title: Director

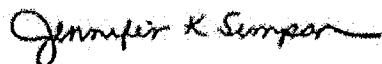
DELCATH SYSTEMS UK LIMITED

By: 
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS GMBH

By: 
Name: Jennifer K. Simpson
Title: Director


DELCATH SYSTEMS B.V.

By: 
Name: Jennifer K. Simpson
Title: Director

[INTELLECTUAL PROPERTY SECURITY AGREEMENT SIGNATURE PAGE]

Acknowledged:

ROSALIND MASTER FUND LP,
by its advisor ROSALIND ADVISORS, INC.,
as Secured Lender

By: 
Name: Steven Salmon
Title: President, Rosalind Advisors, Inc.

SCHEDULE 1

Patents Issued in the United States

Patent No.	Title	Issuance Date	Owned Licensed or	Expiration Date
7,022,097	Method For Treating Glandular Diseases and Malignancies	04/04/2006	Owned	06/24/2023
9,707,331	Apparatus For Removing Chemotherapy Compounds from Blood	07/18/2017	Owned	09/17/2034
D708749	Dual Filter	07/08/2014	Owned	07/08/2028
9,314,561	Filter and Frame Apparatus and Method of Use	04/19/2016	Owned	02/07/2034
9,541,544	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	01/10/2017	Owned	08/28/2033
8,679,057	Recovery Catheter Assembly	03/25/2014	Licensed	03/04/2031
9,265,914	Recovery Catheter Assembly	02/23/2016	Licensed	04/05/2031
9,108,029	Recovery Catheter Assembly and Method	08/18/2015	Licensed	02/09/2034
9,814,823	Recovery Catheter Assembly and Method	10/9/2017	Licensed	07/27/2032

Patent Applications in the United States

Application No.	Application Title	Filing Date	Owned Licensed or
15/651,141	Apparatus For Removing	07/17/2017	Owned

	Chemotherapy Compounds from Blood		
15/071,896	Filter and Frame Apparatus and Method of Use	03/16/2016	Owned
15/346,239	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	11/08/2016	Owned
14/995,677	Recovery Catheter Assembly	01/14/2016	Licensed
14/797,108	Recovery Catheter Assembly and Method	07/11/2015	Licensed
15/728,296	Recovery Catheter Assembly and Method	10/09/2017	Licensed

Foreign Patents

Application No.	Title	Filing Date	Owned or Licensed	Expiration Date
84.098	Dual Filter (Argentina)	06/29/2012	Owned	06/29/2027
343454	Dual Filter (Australia)	07/23/2012	Owned	06/25/2022
146201	Dual Filter (Canada)	05/15/2013	Owned	05/15/2023
ZL 201230277905.5	Dual Filter (China)	03/20/2013	Owned	06/22/2022

001333173	Dual Filter (Europe)	06/27/2012	Owned	06/25/2037
1456186	Dual Filter Cartridge for Fluid Filtration (Japan)	10/26/2012	Owned	10/26/2032
2797644	Filter and Frame Apparatus and Method of Use (Belgium)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (France)	04/12/2017	Owned	12/29/2032
602012031191.6	Filter and Frame Apparatus and Method of Use (Germany)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Great Britain)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Ireland)	04/12/2017	Owned	12/29/2032

2797644	Filter and Frame Apparatus and Method of Use (Italy)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Luxembourg)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Switzerland)	04/12/2017	Owned	12/29/2032
2011224640	Recovery Catheter Assembly (Australian)	08/20/2015	Licensed	03/04/2031
ZL201180022704.3	Recovery Catheter Assembly (China)	08/26/2015	Licensed	03/04/2031
ZL 201510452193.9	Recovery Catheter Assembly (China)	Not available	Licensed	
5982081	Recovery Catheter Assembly (Japan)	08/05/2016	Licensed	03/04/2031

Foreign Patent Applications

Application No.	Title	Filing Date	Owned or Licensed
12847108.3	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17176952.4	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17165333.0	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
18164476.6	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
15104220.7	Filter and Frame Apparatus and Method of Use (Hong Kong)	07/07/2017	Owned
2015210390	Recovery Catheter Assembly (Australia)	03/04/2011	Licensed
2793561	Recovery Catheter Assembly (Canada)	09/05/2012	Licensed
11709548.9	Recovery Catheter Assembly (Europe)	03/04/2011	Licensed
2016-081587	Recovery Catheter Assembly (Japan)	09/06/2012	Licensed
Patent Application 13110687.2	Recovery Catheter Assembly (Hong Kong)	09/06/2012	Licensed

Trademark Portfolio

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
CHEMOFUSE	Registered	European Union	9544297	11/23/2010	9544297	4/12/2011
CHEMOFUSE	Registered	USA	85/172,818	11/9/2010	4,242,543	11/13/2012
CHEMOSAT	Pending	Argentina	3006313	5/31/2010		
CHEMOSAT	Registered	Australia	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Pending	Brazil	831297557	1/10/2012		
CHEMOSAT	Registered	China	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Colombia	1077052	6/25/2010	415377	11/30/2010
CHEMOSAT	Registered	European Union	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Hong Kong	302134449	1/10/2012	302134449	1/10/2012
CHEMOSAT	Registered	India	1935212	3/12/2010	1017505	7/13/2011
CHEMOSAT	Registered	Israel	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Japan	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Korea (South)	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Mexico	1,072,333	3/5/2010	1,187,556	10/29/2010
CHEMOSAT	Registered	New Zealand	854899	1/10/2012	854899	7/11/2012
CHEMOSAT	Registered	Russian Federation	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Taiwan	099009554	3/4/2010	1459056	5/1/2011
CHEMOSAT	Registered	USA	77/944,997	2/25/2010	4,176,059	7/17/2012
CHEMOSAT	Registered	WIPO	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSATURATION	Registered	Argentina	3006314	5/31/2010	3006314	5/31/2010
CHEMOSATURATION	Registered	Colombia	10077050	6/25/2010	415376	11/30/2010
CHEMOSATURATION	Registered	Japan	A0018998	3/8/2010	1033711	3/4/2011
CHEMOSATURATION	Registered	Korea (South)	A0018998	3/8/2010	1033711	3/8/2010
CHEMOSATURATION	Registered	Mexico	1,072,332	3/5/2010	1,187,555	10/29/2010
CHEMOSATURATION	Registered	Taiwan	099009555	3/4/2010	1459057	5/1/2011
DELCATH	Pending	Argentina	3139665	1/10/2012		
DELCATH	Registered	Australia	1468745	1/10/2012	1468745	8/13/2012
DELCATH	Pending	Brazil	831297565	1/10/2012		
DELCATH	Registered	China	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	European Union	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Hong Kong	302134485	1/10/2012	302134485	10/4/2012
DELCATH	Registered	India	2264126	1/9/2012	2264126	1/10/2012
DELCATH	Registered	Israel	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Japan	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Korea (South)	A0024132	4/11/2011	1075265	1/21/2013
DELCATH	Registered	Mexico	1240455	1/11/2012	1360234	4/10/2013

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
DELCATH	Registered	New Zealand	854898	1/10/2012	854898	7/11/2012
DELCATH	Registered	Russian Federation	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Taiwan	101001404	1/10/2012	1536288	9/16/2012
DELCATH	Registered	USA	76/266,056	6/4/2001	2,609,452	8/20/2002
DELCATH	Registered	USA	85/288,673	4/7/2011	4,049,055	11/1/2011
DELCATH	Registered	WIPO	A0024132	4/11/2011	1075265	4/11/2011
DELKERAN	Registered	Argentina	3011124	6/22/2010	3011124	6/22/2010
DELKERAN	Registered	Colombia	10025071	3/3/2010	412426	10/25/2010
DELKERAN	Registered	India	1935213	3/12/2010	1000910	4/8/2011
DELKERAN	Registered	Japan	A0018996	3/8/2010	1033245	3/8/2010
DELKERAN	Pending	Mexico	1,075,546	3/19/2010		
DELKERAN	Registered	Taiwan	099011209	3/12/2010	1431946	10/1/2010
DELKERAN	Registered	WIPO	A0018996	3/8/2010	1033245	3/8/2010
INTENZIF	Registered	European Union	9544487	11/23/2010	9544487	5/10/2011
ISO-FUSE	Pending	Argentina	2982807	3/2/2010		
ISO-FUSE	Registered	Australia	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Pending	Brazil	830540040	3/2/2010		
ISO-FUSE	Registered	China	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Colombia	10024515	3/2/2010	412425	10/25/2010
ISO-FUSE	Registered	European Union	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	India	1929176	3/2/2010	993908	3/30/2011
ISO-FUSE	Registered	Korea (South)	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Mexico	1,071,313	3/2/2010	1,187,552	10/29/2010
ISO-FUSE	Registered	Taiwan	099009131	3/2/2010	1426959	9/1/2010
ISO-FUSE	Registered	USA	77/818,131	9/2/2009	4,272,541	1/8/2013
ISO-FUSE	Registered	WIPO	A0018891	3/1/2010	1033135	3/1/2010
ITENZIF	Registered	European Union	10014165	6/1/2011	10014165	10/13/2011
MELMISAT	Registered	European Union	9544552	11/23/2010	9544552	5/10/2011
PHP	Registered	USA	77/529,005	7/23/2008	3,880,422	11/23/2010
THE DELCATH PHP SYSTEM	Registered	USA	77/529,348	7/23/2008	3,926,021	3/1/2011

Confirmation Receipt

Your assignment has been received by the USPTO.
The coversheet of the assignment is displayed below:

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

SUBMISSION TYPE:

CORRECTIVE ASSIGNMENT

NATURE OF CONVEYANCE:

Corrective Assignment to correct the NAME OF CONVEYING PARTY FROM DELCATH HOLDINGS B.V. TO DELCATH SYSTEMS B.V. previously recorded on Reel 049127 Frame 0954. Assignor(s) hereby confirms the SECURITY AGREEMENT.

CONVEYING PARTY DATA

Name	Execution Date
DELCATH SYSTEMS, INC.	04/18/2019
DECALTH HOLDINGS LIMITED	04/18/2019
DELCATH SYSTEMS LIMITED	04/18/2019
DELCATH SYSTEMS UK LIMITED	04/18/2019
DELCATH SYSTEMS GMBH	04/18/2019
DELCATH SYSTEMS B.V.	04/18/2019

RECEIVING PARTY DATA

Name:	ROSALIND MASTER FUND LP
Street Address:	175 BLOOR STREET EAST
Internal Address:	SUITE 1316 NORTH TOWER
City:	TORONTO
State/Country:	CANADA
Postal Code:	M4W 3R8

PROPERTY NUMBERS Total: 15

Property Type	Number
Patent Number:	7022097
Patent Number:	9707331

Patent Number:	D708749
Patent Number:	9314561
Patent Number:	9541544
Patent Number:	8679057
Patent Number:	9265914
Patent Number:	9108029
Patent Number:	9814823
Application Number:	15651141
Application Number:	15071896
Application Number:	15346239
Application Number:	14995677
Application Number:	14797108
Application Number:	15728296

CORRESPONDENCE DATA

Fax Number:

Phone: 212-655-3320

Email: pwright@chapman.com

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.

Correspondent Name: CHAPMAN AND CUTLER LLP

Address Line 1: 1270 AVENUE OF THE AMERICAS, 30TH FLOOR

Address Line 2: ATTN: PATRICIA A. WRIGHT

Address Line 4: NEW YORK, NEW YORK 10020

NAME OF SUBMITTER:	PATRICIA A. WRIGHT
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Signature:	/Patricia A. Wright/
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Date:	05/17/2019
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Total Attachments: 33

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RECEIPT INFORMATION

EPAS ID: PAT5529316
Receipt Date: 05/17/2019

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Delcath Systems, Inc.

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) April 18, 2019

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☒ Other Correction/Amendment

2. Name and address of receiving party(ies)

Name: Rosalind Master Fund LP

Internal Address: _____

Street Address: 175 Bloor Street East

Suite 1316 North Tower

City: Toronto

State: Ontario

Country: Canada Zip: M4W 3R8

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

B. Patent No.(s)

See Schedule 1 attached to the Intellectual
Property Security Agreement

See Schedule 1 attached to the
Intellectual Property Security Agreement

Additional numbers attached? ☒ Yes ☐ No

**5. Name and address to whom correspondence
concerning document should be mailed:**

Name: Chapman and Cutler LLP

Internal Address: Attn: Patricia A. Wright

Street Address: 1270 Avenue of the Americas

City: New York

State: New York Zip: 10020

Phone Number: (212) 655-3320

Docket Number: _____

Email Address: pwright@chapman.com

**6. Total number of applications and patents
involved: 15**

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

- ☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized UserName _____

9. Signature: Patricia A. Wright

Signature

05/15/2019

Date

Patricia A. Wright

Name of Person Signing

Total number of pages including cover
sheet, attachments, and documents:

30

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

ADDITIONAL NAMES OF CONVEYING PARTIES

<u>PARTY NAME</u>	<u>ORGINATIONAL TYPE</u>	<u>INCORPORATION OF FOREIGN LLC</u>
Decalth Holdings Limited	LLC	Ireland
Delcath Systems Limited	LLC	Ireland
Delcath Systems UK Limited	LLC	United Kingdom
Delcath Systems GMBH	LLC	Germany
Delcath Systems B.V.	LLC	Netherlands

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (this “**Agreement**”), dated as of April 26, 2019, by Delcath Systems, Inc., a Delaware corporation on behalf of itself and each of its Subsidiaries and each of its Subsidiaries listed on the signature page hereto (collectively, the “**Grantor**”), in favor of the holders of the Company’s 8% Secured Promissory Notes identified on the signature pages hereto, and their endorsees, transferees and assigns, as secured lenders (each, a “**Secured Lender**” and collectively, the “**Secured Lenders**”).

WHEREAS:

A. Reference is made to that certain Security Agreement (the “**Security Agreement**”), entered into by and among the Grantor, the other “Guarantors” party thereto, and the Secured Lenders, which secures certain now existing and future arising obligations owing to the Secured Lender (as defined in the Security Agreement) under the Transaction Documents (as defined in the Purchase Agreement (as defined below)), as provided in the Security Agreement;

B. Pursuant to the Security Agreement and that certain Securities Purchase Agreement (the “**Purchase Agreement**”), entered into between the Grantor and Secured Lender, the Grantor is required to execute and deliver to the Secured Lender this Agreement;

C. Pursuant to the terms of the Security Agreement, the Grantor has granted to the Secured Lender (as defined in the Security Agreement), a security interest in substantially all the assets of the Grantor, including all right, title and interest of the Grantor in, the IP Collateral (as defined below); and

D. Capitalized terms used and not otherwise defined herein that are defined in the Security Agreement or the Purchase Agreement shall have the meanings given such terms in the Security Agreement or the Purchase Agreement.

NOW, THEREFORE, in consideration of the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby grants to the Secured Lender, to secure the Obligations (as defined in the Security Agreement), a continuing security interest in all of the Grantor’s right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired:

1. Each United States and foreign trademark and trademark application, including, without limitation, each United States federally registered trademark and trademark application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

2. Each trademark license, including, without limitation, each trademark license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

3. All products and proceeds of the foregoing items 1 through 2, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement,

misappropriation, dilution, violation or other impairment of any trademark, including, without limitation, any trademark referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a trademark application referred to in Schedule 1 and any trademark licensed under any trademark license listed on Schedule 1 annexed hereto (items 1 through 3 being herein collectively referred to as the “**Trademark Collateral**”);

4. Each United States and foreign patent and patent application, including, without limitation, each United States federally registered patent and patent application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

5. Each patent license, including, without limitation, each patent license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

6. All products and proceeds of the foregoing items 4 through 5, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any patent, including, without limitation, any patent referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a patent application referred to in Schedule 1 and any patent licensed under any patent license listed on Schedule 1 annexed hereto (items 4 through 6 being herein collectively referred to as the “**Patent Collateral**”);

7. If applicable, each United States and foreign copyright and copyright application, including, without limitation, each United States federally registered copyright and copyright application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

8. If applicable, each copyright license, including, without limitation, each copyright license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

9. All products and proceeds of the foregoing items 7 through 8, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any copyright, including, without limitation, any copyright referred to in Schedule 1 annexed hereto, any copyright issued pursuant to a copyright application referred to in Schedule 1 and any copyright licensed under any copyright license listed on Schedule 1 annexed hereto (items 7 through 9 being herein collectively referred to as the “**Copyright Collateral**”; items 1 through 9 being herein (i.e., the Trademark Collateral, the Patent Collateral, and the Copyright Collateral) collectively referred to as the “**IP Collateral**”).

10. This security interest is granted in conjunction with the security interests granted to the Secured Lender, pursuant to the Security Agreement and the other Transaction Documents (as defined in the Purchase Agreement). The Grantor hereby acknowledges and affirms that the rights and remedies of the Secured Lender with respect to the security interest in the IP Collateral made and granted hereby are more fully set forth in the Transaction Documents (as defined in the Purchase Agreement), the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Capitalized terms used but not defined herein have the respective

meanings ascribed thereto in the Transaction Documents (as defined in the Purchase Agreement).

11. Grantor shall give Secured Lender prior written notice of no less than five (5) Business Days before filing any additional application for registration of any trademark and prompt notice in writing of any additional trademark registrations, patent registration, or copyright registrations granted therefor after the date hereof. Without limiting Grantor's obligations under this paragraph, Grantor hereby authorizes Secured Lender unilaterally to modify this Agreement by amending Schedule 1 to include any future United States registered trademarks, patents, copyrights or applications therefor of Grantor. Notwithstanding the foregoing, no failure to so modify this Agreement or amend Schedule 1 shall in any way affect, invalidate or detract from Secured Lender's continuing security interest in all Collateral, whether or not listed on Schedule 1.

12. Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their trademarks subject to the security interest hereunder.

13. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

14. This Agreement is a Transaction Document (as defined in the Purchase Agreement).

15. This Agreement shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Agreement and all disputes arising hereunder shall be governed by, the laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The parties hereto (a) agree that any legal action or proceeding with respect to this Agreement or any other agreement, document, or other instrument executed in connection herewith or therewith, shall be brought in any state or federal court located within the City of New York, New York, (b) irrevocably waive any objections which either may now or hereafter have to the venue of any suit, action or proceeding arising out of or relating to this Agreement, or any other agreement, document, or other instrument executed in connection herewith, brought in the aforementioned courts and (c) further irrevocably waive any claim that any such suit, action, or proceeding brought in any such court has been brought in an inconvenient forum.

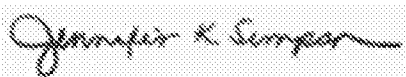
16. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Debtors and the Secured Lenders holding at least 50.1% in interest of the Notes, then outstanding, provided that if any modification, amendment or termination disproportionately and adversely impacts a Secured Lender (or group of Secured Lenders), the consent of such disproportionately impacted

Secured Lender (or group of Secured Lenders) shall also be required, or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought.


[Remainder of Page Intentionally Left Blank; Signature Page Follows]

The Grantor has caused this Intellectual Property Security Agreement to be duly executed by its duly authorized officer thereunto as of the date first set forth above.


DELCATH SYSTEMS, INC.

By: 
Name Jennifer K. Simpson
Title: President & CEO


DELCATH HOLDINGS LIMITED

By: 
Name: Jennifer K. Simpson
Title: Director


DELCATH SYSTEMS LIMITED

By: 
Name: Jennifer K. Simpson
Title: Director


DELCATH SYSTEMS UK LIMITED

By: 
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS GMBH

By: 
Name: Jennifer K. Simpson
Title: Director


DELCATH SYSTEMS B.V.

By: 
Name: Jennifer K. Simpson
Title: Director


[INTELLECTUAL PROPERTY SECURITY AGREEMENT SIGNATURE PAGE]

Acknowledged:

ROSALIND OPPORTUNITIES FUND I LP,
by its advisor ROSALIND ADVISORS, INC.,
as Secured Lender

By: 
Name: Steven Salamon
Title: President, Rosalind Advisors, Inc.

ROSALIND MASTER FUND LP,
by its advisor ROSALIND ADVISORS, INC.,
as Secured Lender

By: 
Name: Steven Salamon
Title: President, Rosalind Advisors, Inc.

SCHEDULE 1

Patents Issued in the United States

Patent No.	Title	Issuance Date	Owned Licensed or	Expiration Date
7,022,097	Method For Treating Glandular Diseases and Malignancies	04/04/2006	Owned	06/24/2023
9,707,331	Apparatus For Removing Chemotherapy Compounds from Blood	07/18/2017	Owned	09/17/2034
D708749	Dual Filter	07/08/2014	Owned	07/08/2028
9,314,561	Filter and Frame Apparatus and Method of Use	04/19/2016	Owned	02/07/2034
9,541,544	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	01/10/2017	Owned	08/28/2033
8,679,057	Recovery Catheter Assembly	03/25/2014	Licensed	03/04/2031
9,265,914	Recovery Catheter Assembly	02/23/2016	Licensed	04/05/2031
9,108,029	Recovery Catheter Assembly and Method	08/18/2015	Licensed	02/09/2034
9,814,823	Recovery Catheter Assembly and Method	10/9/2017	Licensed	07/27/2032

Patent Applications in the United States

Application No.	Application Title	Filing Date	Owned Licensed or
15/651,141	Apparatus For Removing	07/17/2017	Owned

	Chemotherapy Compounds from Blood		
15/071,896	Filter and Frame Apparatus and Method of Use	03/16/2016	Owned
15/346,239	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	11/08/2016	Owned
14/995,677	Recovery Catheter Assembly	01/14/2016	Licensed
14/797,108	Recovery Catheter Assembly and Method	07/11/2015	Licensed
15/728,296	Recovery Catheter Assembly and Method	10/09/2017	Licensed

Foreign Patents

Application No.	Title	Filing Date	Owned or Licensed	Expiration Date
84.098	Dual Filter (Argentina)	06/29/2012	Owned	06/29/2027
343454	Dual Filter (Australia)	07/23/2012	Owned	06/25/2022
146201	Dual Filter (Canada)	05/15/2013	Owned	05/15/2023
ZL 201230277905.5	Dual Filter (China)	03/20/2013	Owned	06/22/2022

001333173	Dual Filter (Europe)	06/27/2012	Owned	06/25/2037
1456186	Dual Filter Cartridge for Fluid Filtration (Japan)	10/26/2012	Owned	10/26/2032
2797644	Filter and Frame Apparatus and Method of Use (Belgium)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (France)	04/12/2017	Owned	12/29/2032
602012031191.6	Filter and Frame Apparatus and Method of Use (Germany)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Great Britain)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Ireland)	04/12/2017	Owned	12/29/2032

2797644	Filter and Frame Apparatus and Method of Use (Italy)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Luxembourg)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Switzerland)	04/12/2017	Owned	12/29/2032
2011224640	Recovery Catheter Assembly (Australian)	08/20/2015	Licensed	03/04/2031
ZL201180022704.3	Recovery Catheter Assembly (China)	08/26/2015	Licensed	03/04/2031
ZL 201510452193.9	Recovery Catheter Assembly (China)	Not available	Licensed	
5982081	Recovery Catheter Assembly (Japan)	08/05/2016	Licensed	03/04/2031

Foreign Patent Applications

Application No.	Title	Filing Date	Owned or Licensed
12847108.3	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17176952.4	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17165333.0	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
18164476.6	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
15104220.7	Filter and Frame Apparatus and Method of Use (Hong Kong)	07/07/2017	Owned
2015210390	Recovery Catheter Assembly (Australia)	03/04/2011	Licensed
2793561	Recovery Catheter Assembly (Canada)	09/05/2012	Licensed
11709548.9	Recovery Catheter Assembly (Europe)	03/04/2011	Licensed
2016-081587	Recovery Catheter Assembly (Japan)	09/06/2012	Licensed
Patent Application 13110687.2	Recovery Catheter Assembly (Hong Kong)	09/06/2012	Licensed

Trademark Portfolio

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
CHEMOFUSE	Registered	European Union	9544297	11/23/2010	9544297	4/12/2011
CHEMOFUSE	Registered	USA	85/172,818	11/9/2010	4,242,543	11/13/2012
CHEMOSAT	Pending	Argentina	3006313	5/31/2010		
CHEMOSAT	Registered	Australia	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Pending	Brazil	831297557	1/10/2012		
CHEMOSAT	Registered	China	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Colombia	1077052	6/25/2010	415377	11/30/2010
CHEMOSAT	Registered	European Union	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Hong Kong	302134449	1/10/2012	30213449	1/10/2012
CHEMOSAT	Registered	India	1935212	3/12/2010	1017505	7/13/2011
CHEMOSAT	Registered	Israel	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Japan	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Korea (South)	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Mexico	1,072,333	3/5/2010	1,187,556	10/29/2010
CHEMOSAT	Registered	New Zealand	854899	1/10/2012	854899	7/11/2012
CHEMOSAT	Registered	Russian Federation	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Taiwan	099009554	3/4/2010	1459056	5/1/2011
CHEMOSAT	Registered	USA	77/944,997	2/25/2010	4,176,059	7/17/2012
CHEMOSAT	Registered	WIPO	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSATURATION	Registered	Argentina	3006314	5/31/2010	3006314	5/31/2010
CHEMOSATURATION	Registered	Colombia	10077050	6/25/2010	415376	11/30/2010
CHEMOSATURATION	Registered	Japan	A0018998	3/8/2010	1033711	3/4/2011
CHEMOSATURATION	Registered	Korea (South)	A0018998	3/8/2010	1033711	3/8/2010
CHEMOSATURATION	Registered	Mexico	1,072,332	3/5/2010	1,187,555	10/29/2010
CHEMOSATURATION	Registered	Taiwan	099009555	3/4/2010	1459057	5/1/2011
DELCATH	Pending	Argentina	3139665	1/10/2012		
DELCATH	Registered	Australia	1468745	1/10/2012	1468745	8/13/2012
DELCATH	Pending	Brazil	831297565	1/10/2012		
DELCATH	Registered	China	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	European Union	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Hong Kong	302134485	1/10/2012	302134485	10/4/2012
DELCATH	Registered	India	2264126	1/9/2012	2264126	1/10/2012
DELCATH	Registered	Israel	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Japan	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Korea (South)	A0024132	4/11/2011	1075265	1/21/2013
DELCATH	Registered	Mexico	1240455	1/11/2012	1360234	4/10/2013

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
DELCATH	Registered	New Zealand	854898	1/10/2012	854898	7/11/2012
DELCATH	Registered	Russian Federation	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Taiwan	101001404	1/10/2012	1536288	9/16/2012
DELCATH	Registered	USA	76/266,056	6/4/2001	2,609,452	8/20/2002
DELCATH	Registered	USA	85/288,673	4/7/2011	4,049,055	11/1/2011
DELCATH	Registered	WIPO	A0024132	4/11/2011	1075265	4/11/2011
DELKERAN	Registered	Argentina	3011124	6/22/2010	3011124	6/22/2010
DELKERAN	Registered	Colombia	10025071	3/3/2010	412426	10/25/2010
DELKERAN	Registered	India	1935213	3/12/2010	1000910	4/8/2011
DELKERAN	Registered	Japan	A0018996	3/8/2010	1033245	3/8/2010
DELKERAN	Pending	Mexico	1,075,546	3/19/2010		
DELKERAN	Registered	Taiwan	099011209	3/12/2010	1431946	10/1/2010
DELKERAN	Registered	WIPO	A0018996	3/8/2010	1033245	3/8/2010
INTENZIF	Registered	European Union	9544487	11/23/2010	9544487	5/10/2011
ISO-FUSE	Pending	Argentina	2982807	3/2/2010		
ISO-FUSE	Registered	Australia	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Pending	Brazil	830540040	3/2/2010		
ISO-FUSE	Registered	China	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Colombia	10024515	3/2/2010	412425	10/25/2010
ISO-FUSE	Registered	European Union	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	India	1929176	3/2/2010	993908	3/30/2011
ISO-FUSE	Registered	Korea (South)	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Mexico	1,071,313	3/2/2010	1,187,552	10/29/2010
ISO-FUSE	Registered	Taiwan	099009131	3/2/2010	1426959	9/1/2010
ISO-FUSE	Registered	USA	77/818,131	9/2/2009	4,272,541	1/8/2013
ISO-FUSE	Registered	WIPO	A0018891	3/1/2010	1033135	3/1/2010
ITENZIF	Registered	European Union	10014165	6/1/2011	10014165	10/13/2011
MELMISAT	Registered	European Union	9544552	11/23/2010	9544552	5/10/2011
PHP	Registered	USA	77/529,005	7/23/2008	3,880,422	11/23/2010
THE DELCATH PHP SYSTEM	Registered	USA	77/529,348	7/23/2008	3,926,021	3/1/2011

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Delcath Systems, Inc.

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) April 18, 2019

- ☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Rosalind Master Fund LP

Internal Address: _____

Street Address: 175 Bloor Street East

Suite 1316 North Tower

City: Toronto

State: Ontario

Country: Canada Zip: M4W 3R8

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

See Schedule 1 attached to the Intellectual
Property Security Agreement

B. Patent No.(s)

See Schedule 1 attached to the Intellectual
Property Security Agreement

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Chapman and Cutler LLP

Internal Address: Attn: Patricia Wright

Street Address: 1270 Avenue of the Americas

City: New York

State: New York Zip: 10020

Phone Number: (212) 655-3320

Docket Number: _____

Email Address: pwright@chapman.com

6. Total number of applications and patents involved: 15

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

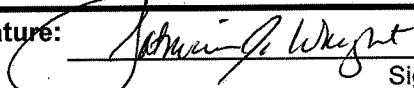
- ☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized User Name _____

9. Signature:


Signature

Patricia A. Wright

Name of Person Signing

05/09/2019

Date

Total number of pages including cover
sheet, attachments, and documents:

15

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

ADDITIONAL NAMES OF CONVEYING PARTIES

<u>PARTY NAME</u>	<u>ORGINATIONAL TYPE</u>	<u>INCORPORATION OF FOREIGN LLC</u>
Decalth Holdings Limited	LLC	Ireland
Delcath Systems Limited	LLC	Ireland
Delcath Systems UK Limited	LLC	United Kingdom
Delcath Systems GMBH	LLC	Germany
Delcath Holdings B.V.	LLC	Netherlands

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (this “**Agreement**”), dated as of April 18, 2019, by Delcath Systems, Inc., a Delaware corporation on behalf of itself and each of its Subsidiaries and each of its Subsidiaries listed on the signature page hereto (collectively, the “**Grantor**”), in favor of the holders of the Company’s 8% Secured Promissory Notes identified on the signature pages hereto, and their endorsees, transferees and assigns, as secured lenders (each, a “**Secured Lender**” and collectively, the “**Secured Lenders**”).

WHEREAS:

A. Reference is made to that certain Security Agreement (the “**Security Agreement**”), entered into by and among the Grantor, the other “Guarantors” party thereto, and the Secured Lenders, which secures certain now existing and future arising obligations owing to the Secured Lender (as defined in the Security Agreement) under the Transaction Documents (as defined in the Purchase Agreement (as defined below)), as provided in the Security Agreement;

B. Pursuant to the Security Agreement and that certain Securities Purchase Agreement (the “**Purchase Agreement**”), entered into between the Grantor and Secured Lender, the Grantor is required to execute and deliver to the Secured Lender this Agreement;

C. Pursuant to the terms of the Security Agreement, the Grantor has granted to the Secured Lender (as defined in the Security Agreement), a security interest in substantially all the assets of the Grantor, including all right, title and interest of the Grantor in, the IP Collateral (as defined below); and

D. Capitalized terms used and not otherwise defined herein that are defined in the Security Agreement or the Purchase Agreement shall have the meanings given such terms in the Security Agreement or the Purchase Agreement.

NOW, THEREFORE, in consideration of the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby grants to the Secured Lender, to secure the Obligations (as defined in the Security Agreement), a continuing security interest in all of the Grantor’s right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired:

1. Each United States and foreign trademark and trademark application, including, without limitation, each United States federally registered trademark and trademark application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

2. Each trademark license, including, without limitation, each trademark license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

3. All products and proceeds of the foregoing items 1 through 2, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement,

misappropriation, dilution, violation or other impairment of any trademark, including, without limitation, any trademark referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a trademark application referred to in Schedule 1 and any trademark licensed under any trademark license listed on Schedule 1 annexed hereto (items 1 through 3 being herein collectively referred to as the “**Trademark Collateral**”);

4. Each United States and foreign patent and patent application, including, without limitation, each United States federally registered patent and patent application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

5. Each patent license, including, without limitation, each patent license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

6. All products and proceeds of the foregoing items 4 through 5, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any patent, including, without limitation, any patent referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a patent application referred to in Schedule 1 and any patent licensed under any patent license listed on Schedule 1 annexed hereto (items 4 through 6 being herein collectively referred to as the “**Patent Collateral**”);

7. If applicable, each United States and foreign copyright and copyright application, including, without limitation, each United States federally registered copyright and copyright application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

8. If applicable, each copyright license, including, without limitation, each copyright license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

9. All products and proceeds of the foregoing items 7 through 8, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any copyright, including, without limitation, any copyright referred to in Schedule 1 annexed hereto, any copyright issued pursuant to a copyright application referred to in Schedule 1 and any copyright licensed under any copyright license listed on Schedule 1 annexed hereto (items 7 through 9 being herein collectively referred to as the “**Copyright Collateral**”; items 1 through 9 being herein (i.e., the Trademark Collateral, the Patent Collateral, and the Copyright Collateral) collectively referred to as the “**IP Collateral**”).

10. This security interest is granted in conjunction with the security interests granted to the Secured Lender, pursuant to the Security Agreement and the other Transaction Documents (as defined in the Purchase Agreement). The Grantor hereby acknowledges and affirms that the rights and remedies of the Secured Lender with respect to the security interest in the IP Collateral made and granted hereby are more fully set forth in the Transaction Documents (as defined in the Purchase Agreement), the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Capitalized terms used but not defined herein have the respective

meanings ascribed thereto in the Transaction Documents (as defined in the Purchase Agreement).

11. Grantor shall give Secured Lender prior written notice of no less than five (5) Business Days before filing any additional application for registration of any trademark and prompt notice in writing of any additional trademark registrations, patent registration, or copyright registrations granted therefor after the date hereof. Without limiting Grantor's obligations under this paragraph, Grantor hereby authorizes Secured Lender unilaterally to modify this Agreement by amending Schedule 1 to include any future United States registered trademarks, patents, copyrights or applications therefor of Grantor. Notwithstanding the foregoing, no failure to so modify this Agreement or amend Schedule 1 shall in any way affect, invalidate or detract from Secured Lender's continuing security interest in all Collateral, whether or not listed on Schedule 1.

12. Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their trademarks subject to the security interest hereunder.

13. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

14. This Agreement is a Transaction Document (as defined in the Purchase Agreement).

15. This Agreement shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Agreement and all disputes arising hereunder shall be governed by, the laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The parties hereto (a) agree that any legal action or proceeding with respect to this Agreement or any other agreement, document, or other instrument executed in connection herewith or therewith, shall be brought in any state or federal court located within the City of New York, New York, (b) irrevocably waive any objections which either may now or hereafter have to the venue of any suit, action or proceeding arising out of or relating to this Agreement, or any other agreement, document, or other instrument executed in connection herewith, brought in the aforementioned courts and (c) further irrevocably waive any claim that any such suit, action, or proceeding brought in any such court has been brought in an inconvenient forum.

16. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Debtors and the Secured Lenders holding at least 50.1% in interest of the Notes, then outstanding, provided that if any modification, amendment or termination disproportionately and adversely impacts a Secured Lender (or group of Secured Lenders), the consent of such disproportionately impacted

Secured Lender (or group of Secured Lenders) shall also be required, or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

The Grantor has caused this Intellectual Property Security Agreement to be duly executed by its duly authorized officer thereunto as of the date first set forth above.

DELCATH SYSTEMS, INC.

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: President/CEO

DELCATH HOLDINGS LIMITED

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS LIMITED

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS UK LIMITED

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS GMBH

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director


DELCATH HOLDINGS B.V.

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

[INTELLECTUAL PROPERTY SECURITY AGREEMENT SIGNATURE PAGE]

Acknowledged:

ROSALIND MASTER FUND LP,
by its advisor ROSALIND ADVISORS, INC.,
as Secured Lender

By: 
Name: Steven Salamon
Title: President, Rosalind Advisors, Inc.

SCHEDULE 1

Patents Issued in the United States

Patent No.	Title	Issuance Date	Owned Licensed or	Expiration Date
7,022,097	Method For Treating Glandular Diseases and Malignancies	04/04/2006	Owned	06/24/2023
9,707,331	Apparatus For Removing Chemotherapy Compounds from Blood	07/18/2017	Owned	09/17/2034
D708749	Dual Filter	07/08/2014	Owned	07/08/2028
9,314,561	Filter and Frame Apparatus and Method of Use	04/19/2016	Owned	02/07/2034
9,541,544	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	01/10/2017	Owned	08/28/2033
8,679,057	Recovery Catheter Assembly	03/25/2014	Licensed	03/04/2031
9,265,914	Recovery Catheter Assembly	02/23/2016	Licensed	04/05/2031
9,108,029	Recovery Catheter Assembly and Method	08/18/2015	Licensed	02/09/2034
9,814,823	Recovery Catheter Assembly and Method	10/9/2017	Licensed	07/27/2032

Patent Applications in the United States

Application No.	Application Title	Filing Date	Owned Licensed or
15/651,141	Apparatus For Removing	07/17/2017	Owned

	Chemotherapy Compounds from Blood		
15/071,896	Filter and Frame Apparatus and Method of Use	03/16/2016	Owned
15/346,239	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	11/08/2016	Owned
14/995,677	Recovery Catheter Assembly	01/14/2016	Licensed
14/797,108	Recovery Catheter Assembly and Method	07/11/2015	Licensed
15/728,296	Recovery Catheter Assembly and Method	10/09/2017	Licensed

Foreign Patents

Application No.	Title	Filing Date	Owned or Licensed	Expiration Date
84.098	Dual Filter (Argentina)	06/29/2012	Owned	06/29/2027
343454	Dual Filter (Australia)	07/23/2012	Owned	06/25/2022
146201	Dual Filter (Canada)	05/15/2013	Owned	05/15/2023
ZL 201230277905.5	Dual Filter (China)	03/20/2013	Owned	06/22/2022

001333173	Dual Filter (Europe)	06/27/2012	Owned	06/25/2037
1456186	Dual Filter Cartridge for Fluid Filtration (Japan)	10/26/2012	Owned	10/26/2032
2797644	Filter and Frame Apparatus and Method of Use (Belgium)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (France)	04/12/2017	Owned	12/29/2032
602012031191.6	Filter and Frame Apparatus and Method of Use (Germany)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Great Britain)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Ireland)	04/12/2017	Owned	12/29/2032

2797644	Filter and Frame Apparatus and Method of Use (Italy)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Luxembourg)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Switzerland)	04/12/2017	Owned	12/29/2032
2011224640	Recovery Catheter Assembly (Australian)	08/20/2015	Licensed	03/04/2031
ZL201180022704.3	Recovery Catheter Assembly (China)	08/26/2015	Licensed	03/04/2031
ZL 201510452193.9	Recovery Catheter Assembly (China)	Not available	Licensed	
5982081	Recovery Catheter Assembly (Japan)	08/05/2016	Licensed	03/04/2031

Foreign Patent Applications

Application No.	Title	Filing Date	Owned or Licensed
12847108.3	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17176952.4	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17165333.0	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
18164476.6	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
15104220.7	Filter and Frame Apparatus and Method of Use (Hong Kong)	07/07/2017	Owned
2015210390	Recovery Catheter Assembly (Australia)	03/04/2011	Licensed
2793561	Recovery Catheter Assembly (Canada)	09/05/2012	Licensed
11709548.9	Recovery Catheter Assembly (Europe)	03/04/2011	Licensed
2016-081587	Recovery Catheter Assembly (Japan)	09/06/2012	Licensed
Patent Application 13110687.2	Recovery Catheter Assembly (Hong Kong)	09/06/2012	Licensed

Trademark Portfolio

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
CHEMOFUSE	Registered	European Union	9544297	11/23/2010	9544297	4/12/2011
CHEMOFUSE	Registered	USA	85/172,818	11/9/2010	4,242,543	11/13/2012
CHEMOSAT	Pending	Argentina	3006313	5/31/2010		
CHEMOSAT	Registered	Australia	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Pending	Brazil	831297557	1/10/2012		
CHEMOSAT	Registered	China	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Colombia	1077052	6/25/2010	415377	11/30/2010
CHEMOSAT	Registered	European Union	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Hong Kong	302134449	1/10/2012	30213449	1/10/2012
CHEMOSAT	Registered	India	1935212	3/12/2010	1017505	7/13/2011
CHEMOSAT	Registered	Israel	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Japan	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Korea (South)	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Mexico	1,072,333	3/5/2010	1,187,556	10/29/2010
CHEMOSAT	Registered	New Zealand	854899	1/10/2012	854899	7/11/2012
CHEMOSAT	Registered	Russian Federation	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Taiwan	099009554	3/4/2010	1459056	5/1/2011
CHEMOSAT	Registered	USA	77/944,997	2/25/2010	4,176,059	7/17/2012
CHEMOSAT	Registered	WIPO	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSATURATION	Registered	Argentina	3006314	5/31/2010	3006314	5/31/2010
CHEMOSATURATION	Registered	Colombia	10077050	6/25/2010	415376	11/30/2010
CHEMOSATURATION	Registered	Japan	A0018998	3/8/2010	1033711	3/4/2011
CHEMOSATURATION	Registered	Korea (South)	A0018998	3/8/2010	1033711	3/8/2010
CHEMOSATURATION	Registered	Mexico	1,072,332	3/5/2010	1,187,555	10/29/2010
CHEMOSATURATION	Registered	Taiwan	099009555	3/4/2010	1459057	5/1/2011
DELCATH	Pending	Argentina	3139665	1/10/2012		
DELCATH	Registered	Australia	1468745	1/10/2012	1468745	8/13/2012
DELCATH	Pending	Brazil	831297565	1/10/2012		
DELCATH	Registered	China	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	European Union	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Hong Kong	302134485	1/10/2012	302134485	10/4/2012
DELCATH	Registered	India	2264126	1/9/2012	2264126	1/10/2012
DELCATH	Registered	Israel	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Japan	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Korea (South)	A0024132	4/11/2011	1075265	1/21/2013
DELCATH	Registered	Mexico	1240455	1/11/2012	1360234	4/10/2013

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
DELCATH	Registered	New Zealand	854898	1/10/2012	854898	7/11/2012
DELCATH	Registered	Russian Federation	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Taiwan	101001404	1/10/2012	1536288	9/16/2012
DELCATH	Registered	USA	76/266,056	6/4/2001	2,609,452	8/20/2002
DELCATH	Registered	USA	85/288,673	4/7/2011	4,049,055	11/1/2011
DELCATH	Registered	WIPO	A0024132	4/11/2011	1075265	4/11/2011
DELKERAN	Registered	Argentina	3011124	6/22/2010	3011124	6/22/2010
DELKERAN	Registered	Colombia	10025071	3/3/2010	412426	10/25/2010
DELKERAN	Registered	India	1935213	3/12/2010	1000910	4/8/2011
DELKERAN	Registered	Japan	A0018996	3/8/2010	1033245	3/8/2010
DELKERAN	Pending	Mexico	1,075,546	3/19/2010		
DELKERAN	Registered	Taiwan	099011209	3/12/2010	1431946	10/1/2010
DELKERAN	Registered	WIPO	A0018996	3/8/2010	1033245	3/8/2010
INTENZIF	Registered	European Union	9544487	11/23/2010	9544487	5/10/2011
ISO-FUSE	Pending	Argentina	2982807	3/2/2010		
ISO-FUSE	Registered	Australia	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Pending	Brazil	830540040	3/2/2010		
ISO-FUSE	Registered	China	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Colombia	10024515	3/2/2010	412425	10/25/2010
ISO-FUSE	Registered	European Union	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	India	1929176	3/2/2010	993908	3/30/2011
ISO-FUSE	Registered	Korea (South)	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Mexico	1,071,313	3/2/2010	1,187,552	10/29/2010
ISO-FUSE	Registered	Taiwan	099009131	3/2/2010	1426959	9/1/2010
ISO-FUSE	Registered	USA	77/818,131	9/2/2009	4,272,541	1/8/2013
ISO-FUSE	Registered	WIPO	A0018891	3/1/2010	1033135	3/1/2010
ITENZIF	Registered	European Union	10014165	6/1/2011	10014165	10/13/2011
MELMISAT	Registered	European Union	9544552	11/23/2010	9544552	5/10/2011
PHP	Registered	USA	77/529,005	7/23/2008	3,880,422	11/23/2010
THE DELCATH PHP SYSTEM	Registered	USA	77/529,348	7/23/2008	3,926,021	3/1/2011

Confirmation Receipt

Your assignment has been received by the USPTO.
The coversheet of the assignment is displayed below:

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
DELCATH SYSTEMS, INC.	04/18/2019
DECALTH HOLDINGS LIMITED	04/18/2019
DELCATH SYSTEMS LIMITED	04/18/2019
DELCATH SYSTEMS UK LIMITED	04/18/2019
DELCATH SYSTEMS GMBH	04/18/2019
DELCATH HOLDINGS B.V.	04/18/2019

RECEIVING PARTY DATA

Name:	ROSALIND MASTER FUND LP
Street Address:	175 BLOOR STREET EAST
Internal Address:	SUITE 1316 NORTH TOWER
City:	TORONTO
State/Country:	CANADA
Postal Code:	M4W 3R8

PROPERTY NUMBERS Total: 15

Property Type	Number
Patent Number:	7022097
Patent Number:	9707331
Patent Number:	D708749
Patent Number:	9314561

Patent Number:	9541544
Patent Number:	8679057
Patent Number:	9265914
Patent Number:	9108029
Patent Number:	9814823
Application Number:	15651141
Application Number:	15071896
Application Number:	15346239
Application Number:	14995677
Application Number:	14797108
Application Number:	15728296

CORRESPONDENCE DATA

Fax Number:

Phone: 212-655-3320

Email: pwright@chapman.com

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.

Correspondent Name: CHAPMAN AND CUTLER LLP

Address Line 1: 1270 AVENUE OF THE AMERICAS, 30TH FLOOR

Address Line 2: ATTN: PATRICIA A. WRIGHT

Address Line 4: NEW YORK, NEW YORK 10020

NAME OF SUBMITTER:	PATRICIA A. WRIGHT
---------------------------	--------------------

Signature:	/Patricia A. Wright/
-------------------	----------------------

Date:	05/09/2019
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Total Attachments: 15

source=Delcath - Rosalind Master Fund LP Patent Recordation of IP Security Agreement dated 04.18.2019#page1.tif

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04.18.2019#page15.tif

RECEIPT INFORMATION

EPAS ID: PAT5514734
Receipt Date: 05/09/2019

**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Delcath Systems, Inc.

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) April 18, 2019

- ☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Rosalind Master Fund LP

Internal Address: _____

Street Address: 175 Bloor Street East

Suite 1316 North Tower

City: Toronto

State: Ontario

Country: Canada Zip: M4W 3R8

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

See Schedule 1 attached to the Intellectual
Property Security Agreement

B. Patent No.(s)

See Schedule 1 attached to the Intellectual
Property Security Agreement

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Chapman and Cutler LLP

Internal Address: Attn: Patricia Wright

Street Address: 1270 Avenue of the Americas

City: New York

State: New York Zip: 10020

Phone Number: (212) 655-3320

Docket Number: _____

Email Address: pwright@chapman.com

6. Total number of applications and patents involved: 15

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

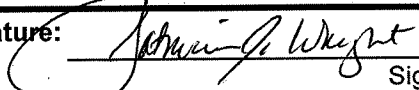
- ☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized User Name _____

9. Signature:



Signature

05/09/2019

Date

Patricia A. Wright

Name of Person Signing

Total number of pages including cover
sheet, attachments, and documents:

15

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

ADDITIONAL NAMES OF CONVEYING PARTIES

<u>PARTY NAME</u>	<u>ORGINATIONAL TYPE</u>	<u>INCORPORATION OF FOREIGN LLC</u>
Decalth Holdings Limited	LLC	Ireland
Delcath Systems Limited	LLC	Ireland
Delcath Systems UK Limited	LLC	United Kingdom
Delcath Systems GMBH	LLC	Germany
Delcath Holdings B.V.	LLC	Netherlands

INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT (this “**Agreement**”), dated as of April 18, 2019, by Delcath Systems, Inc., a Delaware corporation on behalf of itself and each of its Subsidiaries and each of its Subsidiaries listed on the signature page hereto (collectively, the “**Grantor**”), in favor of the holders of the Company’s 8% Secured Promissory Notes identified on the signature pages hereto, and their endorsees, transferees and assigns, as secured lenders (each, a “**Secured Lender**” and collectively, the “**Secured Lenders**”).

WHEREAS:

A. Reference is made to that certain Security Agreement (the “**Security Agreement**”), entered into by and among the Grantor, the other “Guarantors” party thereto, and the Secured Lenders, which secures certain now existing and future arising obligations owing to the Secured Lender (as defined in the Security Agreement) under the Transaction Documents (as defined in the Purchase Agreement (as defined below)), as provided in the Security Agreement;

B. Pursuant to the Security Agreement and that certain Securities Purchase Agreement (the “**Purchase Agreement**”), entered into between the Grantor and Secured Lender, the Grantor is required to execute and deliver to the Secured Lender this Agreement;

C. Pursuant to the terms of the Security Agreement, the Grantor has granted to the Secured Lender (as defined in the Security Agreement), a security interest in substantially all the assets of the Grantor, including all right, title and interest of the Grantor in, the IP Collateral (as defined below); and

D. Capitalized terms used and not otherwise defined herein that are defined in the Security Agreement or the Purchase Agreement shall have the meanings given such terms in the Security Agreement or the Purchase Agreement.

NOW, THEREFORE, in consideration of the mutual agreements set forth herein and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantor hereby grants to the Secured Lender, to secure the Obligations (as defined in the Security Agreement), a continuing security interest in all of the Grantor’s right, title and interest in, to and under the following, whether presently existing or hereafter created or acquired:

1. Each United States and foreign trademark and trademark application, including, without limitation, each United States federally registered trademark and trademark application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

2. Each trademark license, including, without limitation, each trademark license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

3. All products and proceeds of the foregoing items 1 through 2, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement,

misappropriation, dilution, violation or other impairment of any trademark, including, without limitation, any trademark referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a trademark application referred to in Schedule 1 and any trademark licensed under any trademark license listed on Schedule 1 annexed hereto (items 1 through 3 being herein collectively referred to as the “**Trademark Collateral**”);

4. Each United States and foreign patent and patent application, including, without limitation, each United States federally registered patent and patent application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

5. Each patent license, including, without limitation, each patent license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

6. All products and proceeds of the foregoing items 4 through 5, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any patent, including, without limitation, any patent referred to in Schedule 1 annexed hereto, any trademark issued pursuant to a patent application referred to in Schedule 1 and any patent licensed under any patent license listed on Schedule 1 annexed hereto (items 4 through 6 being herein collectively referred to as the “**Patent Collateral**”);

7. If applicable, each United States and foreign copyright and copyright application, including, without limitation, each United States federally registered copyright and copyright application referred to in Schedule 1 annexed hereto, together with any reissues, continuations or extensions thereof and all goodwill associated therewith;

8. If applicable, each copyright license, including, without limitation, each copyright license listed on Schedule 1 annexed hereto, together with all goodwill associated therewith;

9. All products and proceeds of the foregoing items 7 through 8, including, without limitation, any claim by the Grantor against third parties for past, present or future infringement, misappropriation, dilution, violation or other impairment of any copyright, including, without limitation, any copyright referred to in Schedule 1 annexed hereto, any copyright issued pursuant to a copyright application referred to in Schedule 1 and any copyright licensed under any copyright license listed on Schedule 1 annexed hereto (items 7 through 9 being herein collectively referred to as the “**Copyright Collateral**”; items 1 through 9 being herein (i.e., the Trademark Collateral, the Patent Collateral, and the Copyright Collateral) collectively referred to as the “**IP Collateral**”).

10. This security interest is granted in conjunction with the security interests granted to the Secured Lender, pursuant to the Security Agreement and the other Transaction Documents (as defined in the Purchase Agreement). The Grantor hereby acknowledges and affirms that the rights and remedies of the Secured Lender with respect to the security interest in the IP Collateral made and granted hereby are more fully set forth in the Transaction Documents (as defined in the Purchase Agreement), the terms and provisions of which are incorporated by reference herein as if fully set forth herein. Capitalized terms used but not defined herein have the respective

meanings ascribed thereto in the Transaction Documents (as defined in the Purchase Agreement).

11. Grantor shall give Secured Lender prior written notice of no less than five (5) Business Days before filing any additional application for registration of any trademark and prompt notice in writing of any additional trademark registrations, patent registration, or copyright registrations granted therefor after the date hereof. Without limiting Grantor's obligations under this paragraph, Grantor hereby authorizes Secured Lender unilaterally to modify this Agreement by amending Schedule 1 to include any future United States registered trademarks, patents, copyrights or applications therefor of Grantor. Notwithstanding the foregoing, no failure to so modify this Agreement or amend Schedule 1 shall in any way affect, invalidate or detract from Secured Lender's continuing security interest in all Collateral, whether or not listed on Schedule 1.

12. Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their trademarks subject to the security interest hereunder.

13. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

14. This Agreement is a Transaction Document (as defined in the Purchase Agreement).

15. This Agreement shall be construed and enforced in accordance with, and all questions concerning the construction, validity, interpretation and performance of this Agreement and all disputes arising hereunder shall be governed by, the laws of the State of New York, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of New York or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. The parties hereto (a) agree that any legal action or proceeding with respect to this Agreement or any other agreement, document, or other instrument executed in connection herewith or therewith, shall be brought in any state or federal court located within the City of New York, New York, (b) irrevocably waive any objections which either may now or hereafter have to the venue of any suit, action or proceeding arising out of or relating to this Agreement, or any other agreement, document, or other instrument executed in connection herewith, brought in the aforementioned courts and (c) further irrevocably waive any claim that any such suit, action, or proceeding brought in any such court has been brought in an inconvenient forum.

16. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Debtors and the Secured Lenders holding at least 50.1% in interest of the Notes, then outstanding, provided that if any modification, amendment or termination disproportionately and adversely impacts a Secured Lender (or group of Secured Lenders), the consent of such disproportionately impacted

Secured Lender (or group of Secured Lenders) shall also be required, or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

The Grantor has caused this Intellectual Property Security Agreement to be duly executed by its duly authorized officer thereunto as of the date first set forth above.

DELCATH SYSTEMS, INC.

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: President/CEO

DELCATH HOLDINGS LIMITED

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS LIMITED

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS UK LIMITED

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

DELCATH SYSTEMS GMBH

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director


DELCATH HOLDINGS B.V.

By: Jennifer K. Simpson
Name: Jennifer K. Simpson
Title: Director

[INTELLECTUAL PROPERTY SECURITY AGREEMENT SIGNATURE PAGE]

Acknowledged:

ROSALIND MASTER FUND LP,
by its advisor ROSALIND ADVISORS, INC.,
as Secured Lender

By: 
Name: Steven Salamon
Title: President, Rosalind Advisors, Inc.

SCHEDULE 1

Patents Issued in the United States

Patent No.	Title	Issuance Date	Owned Licensed or	Expiration Date
7,022,097	Method For Treating Glandular Diseases and Malignancies	04/04/2006	Owned	06/24/2023
9,707,331	Apparatus For Removing Chemotherapy Compounds from Blood	07/18/2017	Owned	09/17/2034
D708749	Dual Filter	07/08/2014	Owned	07/08/2028
9,314,561	Filter and Frame Apparatus and Method of Use	04/19/2016	Owned	02/07/2034
9,541,544	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	01/10/2017	Owned	08/28/2033
8,679,057	Recovery Catheter Assembly	03/25/2014	Licensed	03/04/2031
9,265,914	Recovery Catheter Assembly	02/23/2016	Licensed	04/05/2031
9,108,029	Recovery Catheter Assembly and Method	08/18/2015	Licensed	02/09/2034
9,814,823	Recovery Catheter Assembly and Method	10/9/2017	Licensed	07/27/2032

Patent Applications in the United States

Application No.	Application Title	Filing Date	Owned Licensed or
15/651,141	Apparatus For Removing	07/17/2017	Owned

	Chemotherapy Compounds from Blood		
15/071,896	Filter and Frame Apparatus and Method of Use	03/16/2016	Owned
15/346,239	A Method of Selecting Chemotherapeutic Agents for an Isolated Organ or Regional Therapy	11/08/2016	Owned
14/995,677	Recovery Catheter Assembly	01/14/2016	Licensed
14/797,108	Recovery Catheter Assembly and Method	07/11/2015	Licensed
15/728,296	Recovery Catheter Assembly and Method	10/09/2017	Licensed

Foreign Patents

Application No.	Title	Filing Date	Owned or Licensed	Expiration Date
84.098	Dual Filter (Argentina)	06/29/2012	Owned	06/29/2027
343454	Dual Filter (Australia)	07/23/2012	Owned	06/25/2022
146201	Dual Filter (Canada)	05/15/2013	Owned	05/15/2023
ZL 201230277905.5	Dual Filter (China)	03/20/2013	Owned	06/22/2022

001333173	Dual Filter (Europe)	06/27/2012	Owned	06/25/2037
1456186	Dual Filter Cartridge for Fluid Filtration (Japan)	10/26/2012	Owned	10/26/2032
2797644	Filter and Frame Apparatus and Method of Use (Belgium)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (France)	04/12/2017	Owned	12/29/2032
602012031191.6	Filter and Frame Apparatus and Method of Use (Germany)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Great Britain)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Ireland)	04/12/2017	Owned	12/29/2032

2797644	Filter and Frame Apparatus and Method of Use (Italy)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Luxembourg)	04/12/2017	Owned	12/29/2032
2797644	Filter and Frame Apparatus and Method of Use (Switzerland)	04/12/2017	Owned	12/29/2032
2011224640	Recovery Catheter Assembly (Australian)	08/20/2015	Licensed	03/04/2031
ZL201180022704.3	Recovery Catheter Assembly (China)	08/26/2015	Licensed	03/04/2031
ZL 201510452193.9	Recovery Catheter Assembly (China)	Not available	Licensed	
5982081	Recovery Catheter Assembly (Japan)	08/05/2016	Licensed	03/04/2031

Foreign Patent Applications

Application No.	Title	Filing Date	Owned or Licensed
12847108.3	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17176952.4	Apparatus For Removing Chemotherapy Compounds from Blood (Europe)	11/07/2012	Owned
17165333.0	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
18164476.6	Filter and Frame Apparatus and Method of Use (Europe)	12/29/2012	Owned
15104220.7	Filter and Frame Apparatus and Method of Use (Hong Kong)	07/07/2017	Owned
2015210390	Recovery Catheter Assembly (Australia)	03/04/2011	Licensed
2793561	Recovery Catheter Assembly (Canada)	09/05/2012	Licensed
11709548.9	Recovery Catheter Assembly (Europe)	03/04/2011	Licensed
2016-081587	Recovery Catheter Assembly (Japan)	09/06/2012	Licensed
Patent Application 13110687.2	Recovery Catheter Assembly (Hong Kong)	09/06/2012	Licensed

Trademark Portfolio

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
CHEMOFUSE	Registered	European Union	9544297	11/23/2010	9544297	4/12/2011
CHEMOFUSE	Registered	USA	85/172,818	11/9/2010	4,242,543	11/13/2012
CHEMOSAT	Pending	Argentina	3006313	5/31/2010		
CHEMOSAT	Registered	Australia	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Pending	Brazil	831297557	1/10/2012		
CHEMOSAT	Registered	China	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Colombia	1077052	6/25/2010	415377	11/30/2010
CHEMOSAT	Registered	European Union	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Hong Kong	302134449	1/10/2012	30213449	1/10/2012
CHEMOSAT	Registered	India	1935212	3/12/2010	1017505	7/13/2011
CHEMOSAT	Registered	Israel	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Japan	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Korea (South)	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Mexico	1,072,333	3/5/2010	1,187,556	10/29/2010
CHEMOSAT	Registered	New Zealand	854899	1/10/2012	854899	7/11/2012
CHEMOSAT	Registered	Russian Federation	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSAT	Registered	Taiwan	099009554	3/4/2010	1459056	5/1/2011
CHEMOSAT	Registered	USA	77/944,997	2/25/2010	4,176,059	7/17/2012
CHEMOSAT	Registered	WIPO	A0018997	3/8/2010	1033246	3/8/2010
CHEMOSATURATION	Registered	Argentina	3006314	5/31/2010	3006314	5/31/2010
CHEMOSATURATION	Registered	Colombia	10077050	6/25/2010	415376	11/30/2010
CHEMOSATURATION	Registered	Japan	A0018998	3/8/2010	1033711	3/4/2011
CHEMOSATURATION	Registered	Korea (South)	A0018998	3/8/2010	1033711	3/8/2010
CHEMOSATURATION	Registered	Mexico	1,072,332	3/5/2010	1,187,555	10/29/2010
CHEMOSATURATION	Registered	Taiwan	099009555	3/4/2010	1459057	5/1/2011
DELCATH	Pending	Argentina	3139665	1/10/2012		
DELCATH	Registered	Australia	1468745	1/10/2012	1468745	8/13/2012
DELCATH	Pending	Brazil	831297565	1/10/2012		
DELCATH	Registered	China	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	European Union	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Hong Kong	302134485	1/10/2012	302134485	10/4/2012
DELCATH	Registered	India	2264126	1/9/2012	2264126	1/10/2012
DELCATH	Registered	Israel	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Japan	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Korea (South)	A0024132	4/11/2011	1075265	1/21/2013
DELCATH	Registered	Mexico	1240455	1/11/2012	1360234	4/10/2013

TRADEMARK	STATUS	COUNTRY	APPLN. NO	APPLICATION DATE	REGISTRATION NO	REGISTRATION DATE
DELCATH	Registered	New Zealand	854898	1/10/2012	854898	7/11/2012
DELCATH	Registered	Russian Federation	A0024132	4/11/2011	1075265	4/11/2011
DELCATH	Registered	Taiwan	101001404	1/10/2012	1536288	9/16/2012
DELCATH	Registered	USA	76/266,056	6/4/2001	2,609,452	8/20/2002
DELCATH	Registered	USA	85/288,673	4/7/2011	4,049,055	11/1/2011
DELCATH	Registered	WIPO	A0024132	4/11/2011	1075265	4/11/2011
DELKERAN	Registered	Argentina	3011124	6/22/2010	3011124	6/22/2010
DELKERAN	Registered	Colombia	10025071	3/3/2010	412426	10/25/2010
DELKERAN	Registered	India	1935213	3/12/2010	1000910	4/8/2011
DELKERAN	Registered	Japan	A0018996	3/8/2010	1033245	3/8/2010
DELKERAN	Pending	Mexico	1,075,546	3/19/2010		
DELKERAN	Registered	Taiwan	099011209	3/12/2010	1431946	10/1/2010
DELKERAN	Registered	WIPO	A0018996	3/8/2010	1033245	3/8/2010
INTENZIF	Registered	European Union	9544487	11/23/2010	9544487	5/10/2011
ISO-FUSE	Pending	Argentina	2982807	3/2/2010		
ISO-FUSE	Registered	Australia	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Pending	Brazil	830540040	3/2/2010		
ISO-FUSE	Registered	China	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Colombia	10024515	3/2/2010	412425	10/25/2010
ISO-FUSE	Registered	European Union	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	India	1929176	3/2/2010	993908	3/30/2011
ISO-FUSE	Registered	Korea (South)	A0018891	3/1/2010	1033135	3/1/2010
ISO-FUSE	Registered	Mexico	1,071,313	3/2/2010	1,187,552	10/29/2010
ISO-FUSE	Registered	Taiwan	099009131	3/2/2010	1426959	9/1/2010
ISO-FUSE	Registered	USA	77/818,131	9/2/2009	4,272,541	1/8/2013
ISO-FUSE	Registered	WIPO	A0018891	3/1/2010	1033135	3/1/2010
ITENZIF	Registered	European Union	10014165	6/1/2011	10014165	10/13/2011
MELMISAT	Registered	European Union	9544552	11/23/2010	9544552	5/10/2011
PHP	Registered	USA	77/529,005	7/23/2008	3,880,422	11/23/2010
THE DELCATH PHP SYSTEM	Registered	USA	77/529,348	7/23/2008	3,926,021	3/1/2011