

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

DEL CATH SYSTEMS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

06-1245881
(I.R.S. Employer
Identification No.)

**810 Seventh Avenue
35th Floor
New York, New York 10019**
(Address of Principal Executive Offices) (Zip Code)

Delcath Systems, Inc. 2009 Stock Incentive Plan, as amended
(Full title of the plan)

Peter J. Graham
Executive Vice President, General Counsel
Delcath Systems, Inc.
810 Seventh Avenue
35th Floor
New York, New York 10019
(212) 489-2100
(Name, address and telephone number, including area code, of agent for service)

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a small reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share(2)	Proposed maximum aggregate offering price(2)	Amount of registration fee(3)
Common Stock (\$.01 par value)	2,300,000 shares	\$1.57	\$3,599,500	\$412.50

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement covers, in addition to the number of shares of common stock, par value \$.01 per share ("Common Stock") of the Registrant stated above, an indeterminate number of additional shares of Common Stock which may become issuable under the Registrant's 2009 Stock Incentive Plan, as amended (the "Plan") by reason of certain corporate transactions or events, including any stock dividend, stock split or any other similar transaction effected which results in an increase in the number of the Registrant's outstanding shares of Common Stock.
- (2) The fee is based solely on the 2,300,000 shares of Common Stock newly available for issuance under the Plan and is estimated in accordance with paragraphs (c) and (h) of Rule 457 under the Securities Act solely for purposes of calculating the registration fee and based upon the average of the high and low prices of the Common Stock reported by the Nasdaq Capital Market on June 7, 2012.
- (3) The registration fee has been calculated pursuant to Section 6(b) of the Securities Act by multiplying .0001146 by the proposed maximum aggregate offering price (as computed in accordance with Rule 457 under the Securities Act solely for the purpose of determining the registration fee of the securities registered hereby).

Explanatory Note

This Registration Statement on Form S-8 ("Registration Statement") is filed pursuant to General Instruction E to Form S-8 for the purpose of registering an additional 2,300,000 shares of the common stock, par value \$0.01 per share, of Delcath Systems, Inc. (the "Company" or "Registrant"), which may be issued pursuant to awards under the Plan. In accordance with General Instruction E to Form S-8, the Company hereby incorporates herein by reference the contents of the Form S-8 filed by the Company with respect to the Plan on May 19, 2010 (Registration No. 333-166956), together with all exhibits filed therewith or incorporated therein by reference to the extent not otherwise amended or superseded by the contents of this Registration Statement.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 8. Exhibits.

- 5.1 Opinion of Skadden Arps, Slate, Meagher & Flom LLP
- 23.1 Consent of Skadden Arps, Slate, Meagher & Flom LLP (included in Exhibit 5.1)
- 23.2 Consent of Ernst & Young LLP
- 23.3 Consent of Grant Thornton LLP
- 99.1 Delcath Systems, Inc. 2009 Stock Incentive Plan, as amended (incorporated by reference to Appendix B to the Registrant's proxy statement on Schedule 14-A, filed April 27, 2012)

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in City of New York, State of New York on the 31 day of May, 2012.

DELCATH SYSTEMS, INC.

By /s/ Eamonn P. Hobbs
Eamonn P. Hobbs
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
<u>/s/ Eamonn P. Hobbs</u> Eamonn P. Hobbs	President, Chief Executive Officer, and Director (principal executive officer)	May 31, 2012
<u>/s/ Graham G. Miao</u> Graham G. Miao	Chief Financial Officer (principal financial officer)	May 29, 2012
<u>/s/ Barbra Keck</u> Barbra Keck	Vice President and Controller (principal accounting officer)	May 31, 2012
<u>/s/ Harold S. Koplewicz</u> Harold S. Koplewicz	Chairman of the Board	May 29, 2012
<u>/s/ Robert B. Ladd</u> Robert B. Ladd	Director	May 29, 2012
<u>/s/ Gabriel Leung</u> Gabriel Leung	Director	May 30, 2012
<u>/s/ Laura A. Philips</u> Laura A. Philips	Director	May 31, 2012
<u>/s/ Roger G. Stoll</u> Roger G. Stoll	Director	May 31, 2012
<u>/s/ Douglas G. Watson</u> Douglas G. Watson	Director	May 29, 2012

[Skadden, Arps, Slate, Meagher & Flom LLP Letterhead]

June 8, 2012

Delcath Systems, Inc.
810 Seventh Avenue
Suite 3505
New York, New York 10019

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as special counsel to Delcath Systems, Inc., a Delaware corporation (the "Company"), and are delivering this opinion in connection with the Registration Statement on Form S-8 of the Company (the "Registration Statement") being filed with the Securities and Exchange Commission (the "Commission") on the date hereof, relating to the registration by the Company of 2,300,000 shares (the "Shares") of the Company's common stock, par value \$0.01 per share (the "Common Stock"), authorized for issuance pursuant to the Company's 2009 Stock Incentive Plan, as amended (the "Plan").

This opinion is being furnished in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act of 1933, as amended (the "Act").

In connection with this opinion, we have examined and relied on originals or copies, certified or otherwise identified to our satisfaction, of (i) the Registration Statement on Form S-8 as filed with the Commission on the date hereof; (ii) the Plan; (iii) the Amended and Restated Certificate of Incorporation of the Company, certified by the Secretary of the Company as currently in effect; (iv) the By-Laws of the Company, certified by the Secretary of the Company as currently in effect; (v) a specimen certificate representing the Common Stock; (vi) certain resolutions of the Board of Directors of the Company, relating to the Plan, the filing of the Registration Statement and certain related matters, certified by the Secretary of the Company; and (vii) the Final Report of the Inspector of Election for the Company's 2012 Annual Meeting of Shareholders, reflecting approval of the Plan (Proposal No. 4) by a majority of the votes cast in person or by proxy at such meeting. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company and such other documents, certificates and records as we have deemed necessary or appropriate as a basis for the opinion set forth below.

In our examination, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as facsimile, electronic, certified or photostatic copies and the authenticity of the originals of such copies. In making our examination of executed documents, we have assumed that the parties thereto, other than the Company, had the power, corporate or other, to enter into and perform all obligations thereunder and have also assumed the due authorization by all requisite action, corporate or other, and the execution and delivery by such parties of such documents and the validity and binding effect thereof on such parties. As to any facts material to the opinion expressed herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and others and of public officials.

In rendering the opinion set forth below, we have assumed that the certificates evidencing the Shares will be manually signed by one of the authorized officers of the transfer agent and registrar for the Common Stock and registered by such transfer agent and registrar and will conform to the specimen certificate examined by us evidencing the Common Stock. We have also assumed that each award agreement setting forth the terms of each grant of options or other award under the Plan will be consistent with the Plan, duly authorized, and if applicable, validly executed and delivered by the parties thereto, and that the Shares will be issued in accordance with the terms of the Plan for consideration in an amount at least equal to the par value of such Shares.

Members of our firm are admitted to the bar in the State of New York, and we do not express any opinion with respect to the law of any jurisdiction other than the corporate laws of the State of Delaware, and we do not express any opinion as to the effect of any other laws on the opinion stated herein.

Based on and subject to the foregoing, we are of the opinion that the Shares have been duly authorized by the Company and, when the Shares are issued and paid for in full in accordance with the terms and conditions of the Plan and any applicable award agreement, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Skadden, Arps, Slate, Meagher & Flom LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2004 Stock Incentive Plan and the 2009 Stock Incentive Plan of Delcath Systems, Inc. of our reports dated March 5, 2012, with respect to the consolidated financial statements of Delcath Systems, Inc. and the effectiveness of internal control over financial reporting of Delcath Systems, Inc. included in its Form 10-K for the year ended December 31, 2011 filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP
Metro Park, New Jersey

June 7, 2012

Consent of Independent Registered Public Accounting Firm

We have issued our report dated February 24, 2010, with respect to the financial statements for the year ended December 31, 2009 included in the Annual Report of Delcath Systems, Inc. on Form 10-K for the year ended December 31, 2011, which are incorporated by reference in this Registration Statement. We consent to the incorporation by reference in the Registration Statement of the aforementioned report.

/s/ Grant Thornton LLP

Glastonbury, Connecticut

June 7, 2012