

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

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

DELCATH 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
Suite 3505
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
Suite 3505
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	<input type="radio"/>		Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="radio"/>	(Do not check if a small reporting company)	Smaller reporting company	<input type="checkbox"/>

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee (2)
Common Stock (\$.01 par value) (3)	2,200,000 shares	\$13.26	\$29,172,000	\$2,079.96

- (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") stated above, an indeterminate number of additional shares of Common Stock which, by reason of certain events specified in the Delcath Systems, Inc. 2009 Stock Incentive Plan, as amended (the "Plan"), may become issuable pursuant to the provisions of the Plan.
- (2) Estimated pursuant to Rule 457(h)(1) and Rule 457(c) of 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 May 12, 2010.
- (3) Each share of Common Stock includes a related right (a "Right") to purchase one share (subject to adjustment) of Common Stock of the Company. The Rights are not exercisable or transferable apart from the Common Stock at this time, and accordingly no independent value is attributable to such Rights.

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 2,200,000 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 Delcath Systems, Inc. 2009 Stock Incentive Plan, as amended (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 July 24, 2009 (Registration No. 333-160790), 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 Bond, Schoeneck & King, PLLC
23.1	Consent of Bond, Schoeneck & King, PLLC (included in Exhibit 5.1)
23.2	Consent of CCR LLP
99.1	Delcath Systems, Inc. 2009 Stock Incentive Plan, as amended (incorporated by reference to Appendix A to the Registrant’s proxy statement on Schedule 14-A, filed March 30, 2010)

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 19th day of May, 2010.

DELCATH SYSTEMS, INC.

By: /s/Eamonn P. Hobbs
Name: Eamonn P. Hobbs
Title: 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.

SIGNATURE	TITLE	DATE
<u>/s/Eamonn P. Hobbs</u> Eamonn P. Hobbs	President, Chief Executive Officer, and Director (principal executive officer)	May 19, 2010
<u>/s/David A. McDonald</u> David A. McDonald	Chief Financial Officer (principal financial officer)	May 19, 2010
<u>/s/Barbra C. Keck</u> Barbra C. Keck	Vice President and Controller	May 19, 2010
<u>/s/Harold S. Koplewicz</u> Harold S. Koplewicz	Chairman of the Board	May 19, 2010
<u>/s/Pamela R. Contag</u> Pamela R. Contag	Director	May 19, 2010
<u>/s/Robert B. Ladd</u> Robert B. Ladd	Director	May 19, 2010
<u>/s/Laura A. Philips</u> Laura A. Philips	Director	May 19, 2010
<u>/s/Roger G. Stoll</u> Roger G. Stoll	Director	May 19, 2010
<u>/s/Richard L. Taney</u> Richard L. Taney	Director	May 19, 2010

Opinion of Bond, Schoeneck & King, PLLC
One Lincoln Center
Syracuse, New York 13202-1355

May 19, 2010

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

Ladies and Gentlemen:

This opinion letter is furnished to you in connection with your filing of a Registration Statement on Form S-8 (the "Registration Statement") pursuant to the Securities Act of 1933, as amended, on the date hereof relating to the registration of 2,200,000 shares of common stock, par value \$0.01 (the "Common Stock"), of Delcath Systems, Inc., a Delaware corporation (the "Company"), that may be issued pursuant to the Delcath Systems, Inc. 2009 Stock Incentive Plan, as amended (the "Plan").

We have reviewed such documents and made such examination of the law as we have deemed appropriate to give the opinion expressed below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

Our opinion is limited to the matters expressly set forth in this opinion letter, and no other opinions are provided or implied.

Based upon the foregoing, it is our opinion that the 2,200,000 shares of the Company's Common Stock registered pursuant to the Registration Statement and offered by the Company pursuant to the Plan will be, assuming that such shares are validly authorized at the time of issuance and assuming that no change occurs in the applicable law or pertinent facts, when issued in accordance with the Plan, legally issued, fully paid and non-assessable.

Our opinion expressed above is subject to the qualifications that we express no opinion as to the applicability of, compliance with, or effect of any laws except the General Corporation Law of the State of Delaware.

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement.

Very truly yours,

BOND, SCHOENECK & KING, PLLC

/s/ Bond, Schoeneck & King, PLLC

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in this Registration Statement on Form S-8 of Delcath Systems, Inc. (the "Company") of our report dated February 24, 2010, relating to the balance sheets of the Company as of December 31, 2009 and 2008, and the related statements of operations, other comprehensive loss, stockholders' equity, and cash flows for each of the years in the three year period ended December 31, 2009, and cumulative from inception (August 5, 1988) to December 31, 2009 (which report expressed an unqualified opinion), relating to the financial statement schedule and relating to the Company's internal control over financial reporting as of December 31, 2009, included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2009.

/s/CCR LLP

CCR LLP

Glastonbury, Connecticut

May 18, 2010