SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 5 TO

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

NEOPROBE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

2835 (Primary standard industrial Classification number) **31-1080091** (IRS employer identification number)

425 Metro Place North, Suite 300 Dublin, Ohio 43017-1367 (614) 793-7500

(Address and telephone number of principal executive offices)

425 Metro Place North, Suite 300 Dublin, Ohio 43017-1367 (Address of principal place of business)

Brent L. Larson, Vice President, Finance and Chief Financial Officer Neoprobe Corporation 425 Metro Place North, Suite 300 Dublin, Ohio 43017-1367 (614) 793-7500 (Name, address and telephone number of agent for service)

Copies to:

William J. Kelly, Jr., Esq. Porter, Wright, Morris & Arthur LLP 41 South High Street Columbus, Ohio 43215 Telephone No. (614) 227-2136 wjkelly@porterwright.com

Approximate date of commencement of proposed sale to the public: Not Applicable

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

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

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

EXPLANATORY NOTE

Deregistration of Securities

We originally registered 21,817,257 shares of our common stock pursuant to a Registration Statement on Form SB-2 (File No. 333-110858) filed with the Securities and Exchange Commission (the "SEC") on December 2, 2003, as most recently amended on Form S-1 May 5, 2008, and subsequently declared effective by the SEC on May 8, 2008 (the "Registration Statement"). The Registration Statement related to the sale of shares of our common stock by various persons named therein as "selling stockholders," who purchased shares of our common stock through the conversion of debt or the exercise of warrants.

We have filed this Post-effective Amendment No. 5 to the Registration Statement solely for the purpose of fulfilling the Company's obligation under Item 512(a)(3) of Regulation S-K promulgated under the Securities Act of 1933, as amended ("Item 512"), which requires that the Company remove from registration by means of a post-effective amendment any of the securities originally registered by the Registration Statement that remained unsold at the termination of the offering. The offering related to the Registration Statement terminated on April 30, 2009. Pursuant to this Post-effective Amendment No. 5 to the Registration Statement, we are seeking to deregister 1,023,350 shares of our common stock that were registered pursuant to the Registration Statement, we hereby respectfully request that the Securities and Exchange Commission remove from registration those shares of common stock that were registered pursuant to the Registration statement, we registered pursuant to the Registration Statement, we registered pursuant to the Registration of the offering.

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Item 27. Exhibits.

Exhibit Number

NumberExhibit Description

24 * Powers of Attorney (incorporated by reference to the Company's Registration Statement on Form SB-2 filed with the SEC December 2, 2003 (Registration No. 110858), with the exception of the Powers of Attorney for Mr. Aschinger, and Drs. Bland and Johnson, which were filed as Exhibit 24.1 to Post-effective Amendment No. 3 to the Company's Registration Statement on Form SB-2 filed with the SEC September 20, 2007, and the Power of Attorney for Mr. Troup, which is filed herewith).

*Filed herewith

Signatures

In accordance with the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements of filing on Form S-1 and has authorized this Post-effective Amendment No. 5 to its Registration Statement to be signed on its behalf by the undersigned in the City of Dublin, Ohio, on April 30, 2009.

Neoprobe Corporation

By: /s/ Brent L. Larson

Brent L. Larson, Vice President, Finance and Chief Financial Officer

In accordance with the requirements of the Securities Act of 1933, this registration statement was signed by the following persons in the capacities and on the dates indicated:

<u>Signature</u>	Title	Date
/s/ David C. Bupp* David C. Bupp	President, Chief Executive Officer and Director (principal executive officer)	April 30, 2009
/s/ Brent L. Larson Brent L. Larson	Vice President, Finance and Chief Financial Officer (principal financial officer and principal accounting officer)	April 30, 2009
/s/ Carl J. Aschinger, Jr.* Carl J. Aschinger, Jr.	Chairman of the Board of Directors	April 30, 2009
/s/ Reuven Avital* Reuven Avital	Director	April 30, 2009
/s/ Kirby I. Bland* Kirby I. Bland	Director	April 30, 2009
/s/ Owen E. Johnson* Owen E. Johnson	Director	April 30, 2009
/s/ Fred B. Miller* Fred B. Miller	Director	April 30, 2009
/s/ Gordon A. Troup* Gordon A. Troup	Director	April 30, 2009
/s/ J. Frank Whitley, Jr.* J. Frank Whitley, Jr.	Director	April 30, 2009
*By: /s/ Brent L. Larson		

Brent L. Larson, Attorney-in fact

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The undersigned, who is a director of Neoprobe Corporation, a Delaware corporation (the Company), does hereby constitute and appoint David C. Bupp and Brent L. Larson to be his agents and attorneys in-fact, with the power to act fully hereunder without the other and with full power of substitution, to act in the name and on behalf of the undersigned:

- To sign and file with the Securities and Exchange Commission any Post-effective Amendment to the Registration Statement of the Company on Form S-1 (Registration No. 110858) (the "Registration Statement"), for registration under the Securities Act of 1933, as amended, of up to 21,817,257 shares of the Company's common stock, \$.001 par value, by persons who have purchased shares of the Company's common stock or who may purchase shares of the Company's common stock through the conversion of debt or the exercise of warrants; and
- To do and perform in the name and on behalf of the undersigned, in any and all such capacities, every act and thing whatsoever necessary to be done in and about the premises in connection with the filing of the Post-effective Amendment to the Registration Statement as fully as the undersigned could or might do in person, and hereby ratifying all that any such attorney-in-fact or his substitute may do by virtue hereof.

Each agent named above is hereby empowered to determine in his discretion the times when, the purposes for, and the names in which, any power conferred upon him herein shall be exercised and the terms and conditions of any instrument, certificate or document which may be executed by him pursuant to this instrument.

This Power of Attorney shall not be affected by the disability of the undersigned or the lapse of time.

The validity, terms and enforcement of this Power of Attorney shall be governed by those laws of the State of Ohio that apply to instruments negotiated, executed, delivered and performed solely within the State of Ohio.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney this 28th day of April, 2009.

<u>/s/ Gordon A. Troup</u> Gordon A. Troup