

---

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported):

May 15, 2009

StemCells, Inc.

(Exact name of registrant as specified in its charter)

Delaware

000-19871

94-3078125

(State or other jurisdiction  
of incorporation)

(Commission  
File Number)

(I.R.S. Employer  
Identification No.)

3155 Porter Drive, Palo Alto, California

94304

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code:

650.475.3100

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
-

**Item 8.01 Other Events.**

On May 15, 2009, StemCells, Inc. (the "Company") announced that the U.S. Patent and Trademark Office (the "PTO") has mailed notices of intent to issue ex parte reexamination certificates for U.S. Patent Nos. 6,294,346 and 7,101,709, which claim, respectively, methods for using neural stem and progenitor cells for the screening of drugs and biological agents. The '346 and '709 patents are exclusively licensed by the Company. They are the last of the five patents subjected to reexamination proceedings commenced by Neuralstem, Inc. in late 2006 and early 2007. Because all five of these patents have now been upheld by the PTO, the Company has filed a motion with the federal district court in Maryland to re-open the Company's first patent infringement case against Neuralstem. The Company has also filed a motion with the court to consolidate its first and second patent infringement cases against Neuralstem into one.

The Company's press release announcing the action by the PTO and the related court proceedings is filed as Exhibit 99.1 to this Current Report on Form 8-K, and is incorporated herein by reference.

Apart from statements of historical fact, the text of this press release constitutes forward-looking statements regarding, among other things, the future business operations of StemCells, Inc. (the "Company") and the validity, enforceability and value of the Company's patents. These forward-looking statements speak only as of the date of this news release. The Company does not undertake to update any of these forward-looking statements to reflect events or circumstances that occur after the date hereof. Such statements reflect management's current views and are based on certain assumptions that may or may not ultimately prove valid. The Company's actual results may vary materially from those contemplated in such forward-looking statements due to risks and uncertainties to which the Company is subject, including uncertainty regarding the validity and enforceability of our issued patents; litigation risks, including the risk that patents issued by the PTO may be held to be invalid or not infringed, and the high cost of patent litigation; risks as to whether the FDA or other applicable regulatory agencies will permit the Company to continue clinical testing in NCL, PMD or in future clinical trials of proposed therapies for other diseases or conditions despite the novel and unproven nature of the Company's technologies; uncertainties about whether the Company will receive the necessary support of a clinical trial site and its institutional review board to initiate a clinical trial in PMD; uncertainties regarding the Company's ability to obtain the increased capital resources needed to continue its current and planned research and development operations, including such operations of the company for non-therapeutic applications, and to conduct the research, preclinical development and clinical trials necessary for regulatory approvals; uncertainty as to whether HuCNS-SC and any products that may be generated in the future in the Company's cell-based programs will prove safe and clinically effective and not cause tumors or other adverse side effects; uncertainties regarding the Company's manufacturing capabilities given its increasing preclinical and clinical commitments; and other factors that are described under the heading "Risk Factors" in Item 1A of Part II of the Company's Quarterly Report on Form 10-Q.

---

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

StemCells, Inc.

May 15, 2009

By: */s/ Kenneth Stratton*

---

*Name: Kenneth Stratton*

*Title: General Counsel*

---

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press release of StemCells, Inc. dated May 15, 2009

## U.S. Patent Office Upholds StemCells' Patents – Company Moves to Resume Patent Infringement Cases Against Neuralstem

**PALO ALTO, Calif. (May 15, 2009)** – StemCells, Inc. (NASDAQ: STEM) announced today that the U.S. Patent and Trademark Office (PTO) has upheld the validity of the remaining two neural stem cell patents which were subjected to reexamination proceedings commenced by Neuralstem, Inc. The upheld patents are the subject of two related lawsuits initiated by StemCells against Neuralstem, which allege infringement of a total of six patents. These six patents collectively claim the manufacture and use of human neural stem and progenitor cells as tools for drug discovery and as therapeutic agents. The PTO's decision to uphold the two patents is final and cannot be appealed. Consequently, StemCells is asking the federal district court in Maryland to resume the infringement lawsuits against Neuralstem.

“The PTO's latest action is a reaffirmation of the validity of the patents asserted against Neuralstem. Each of our reexamined patents has now been twice tested and twice granted by the Patent Office,” said Martin McGlynn, President and CEO of StemCells, Inc. “We now look forward to our day in court. Litigation can be a slow and meticulous process, but we plan to ensure that those who wish to commercialize neural stem cells for drug discovery or therapeutic uses, recognize the validity and value of our patents.”

The two most recently upheld patents are U.S. Patent Number 6,294,346 and U.S. Patent Number 7,101,709, which claim, respectively, methods for using neural stem and progenitor cells for the screening of drugs and biological agents. In its latest communications, the PTO has issued Notices of Intent to Issue *Ex Parte* Reexamination Certificates for both the '346 and '709 patents. During the reexamination proceedings, the Company submitted minor amendments to certain, but not all, of the claims. With these notices of allowance, the PTO has affirmed all of the previously issued claims, as amended, and so all of the reexaminations initiated by Neuralstem have been resolved to StemCells' satisfaction. There are a total of 173 patent claims going forward from the six patents involved in the two suits against Neuralstem.

### More About the Litigation Against Neuralstem

StemCells initiated its first lawsuit against Neuralstem in July 2006 in federal court in Maryland, alleging that Neuralstem's activities violate claims in four patents exclusively licensed to StemCells. In late 2006, Neuralstem petitioned the PTO to reexamine two of the patents in the case, namely U.S. Patent No. 6,294,346 (claiming the use of human neural stem cells for drug screening) and U.S. Patent No. 7,101,709 (claiming the use of human neural stem cells for screening biological agents). Then, in April 2007, Neuralstem petitioned the PTO to reexamine the remaining two patents in the case, namely U.S. Patent No. 5,851,832 (claiming methods for proliferating human neural stem cells) and U.S. Patent No. 6,497,872 (claiming methods for transplanting human neural stem cells). In June 2007, the Company agreed to a voluntary stay of the first lawsuit while the reexamination proceedings were ongoing. In April 2008, the PTO reaffirmed the '832 and '872 patents.

In May 2008, StemCells filed a second patent infringement lawsuit in federal court in Northern California against both Neuralstem and its two founders, alleging that Neuralstem's activities infringe claims in two additional patents exclusively licensed to the Company, specifically U.S. Patent No. 7,361,505 (claiming composition of matter of human neural stem cells derived from any source material) and U.S. Patent No. 7,115,418 (claiming methods for proliferating human neural stem cells). In addition, the second suit alleges various state law causes of action against Neuralstem arising out of its repeated derogatory statements to the public about our patent portfolio. In July 2008, the California court denied Neuralstem's motion to dismiss the second lawsuit and then, in August 2008, it transferred the suit to Maryland for resolution.

### About StemCells, Inc.

StemCells, Inc. is a clinical-stage biotechnology company focused on the research, development and commercialization of products derived from stem and progenitor cell technologies. In its therapeutic product development programs, StemCells is focused on developing cell-based therapeutics to treat diseases of the central nervous system and liver. StemCells has pioneered the discovery and development of HuCNS-SC<sup>®</sup> cells, its highly purified, expandable population of human neural stem cells. StemCells has completed a six patient Phase I clinical trial of its proprietary HuCNS-SC product candidate as a treatment for neuronal ceroid lipofuscinosis (NCL), a rare and fatal neurodegenerative disease that affects infants and young children. StemCells has also received approval from the Food and Drug Administration (FDA) to initiate a Phase I clinical trial of the HuCNS-SC cells to treat Pelizaeus-Merzbacher Disease (PMD), a rare and fatal brain disorder that mainly affects young children. StemCells is also pursuing applications of its cell technologies to develop research tools, such as cell-based assays, media and reagent tools, which the Company believes represent nearer-term commercial opportunities. StemCells has exclusive rights to approximately 55 issued or allowed U.S. patents and approximately 200 granted or allowed non-U.S. patents. Further information about StemCells is available on its web site at: [www.stemcellsin.com](http://www.stemcellsin.com).

*Apart from statements of historical fact, the text of this press release constitutes forward-looking statements regarding, among other things, the future business operations of StemCells, Inc. (the "Company") and the validity, enforceability and value of the Company's patents. These forward-looking statements speak only as of the date of this news release. The Company does not undertake to update any of these forward-looking statements to reflect events or circumstances that occur after the date hereof. Such statements reflect management's current views and are based on certain assumptions that may or may not ultimately prove valid. The Company's actual results may vary materially from those contemplated in such forward-looking statements due to risks and uncertainties to which the Company is subject, including uncertainty regarding the validity and enforceability of our issued patents; litigation risks, including the risk that patents issued by the PTO may be held to be invalid or not infringed, and the high cost of patent litigation; risks as to whether the FDA or other applicable regulatory agencies will permit the Company to continue clinical testing in NCL, PMD or in future clinical trials of proposed therapies for other diseases or conditions despite the novel and unproven nature of the Company's technologies; uncertainties about whether the Company will receive the necessary support of a*

*clinical trial site and its institutional review board to initiate a clinical trial in PMD; uncertainties regarding the Company's ability to obtain the increased capital resources needed to continue its current and planned research and development operations, including such operations of the company for non-therapeutic applications, and to conduct the research, preclinical development and clinical trials necessary for regulatory approvals; uncertainty as to whether HuCNS-SC and any products that may be generated in the future in the Company's cell-based programs will prove safe and clinically effective and not cause tumors or other adverse side effects; uncertainties regarding the Company's manufacturing capabilities given its increasing preclinical and clinical commitments; and other factors that are described under the heading "Risk Factors" in Item 1A of Part II of the Company's Quarterly Report on Form 10-Q.*

CONTACT:

StemCells, Inc.  
Rodney Young  
Chief Financial Officer  
650-475-3100, Ext. 105  
irpr@stemcellsinc.com  
StemCells, Inc.

SOURCE:

###