

SOMANETICS CORP  
Form 8-K  
August 10, 2009

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

OMB APPROVAL

OMB  
Number: 3235-0060  
Expires: June 30,  
2009  
Estimated average  
burden hours per  
response 5.00

CURRENT REPORT

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

Date of Report (Date of earliest event reported)

August 10, 2009

SOMANETICS CORPORATION

---

(Exact name of registrant as specified in its charter)

Michigan  
(State or other jurisdiction  
of incorporation)

0-19095  
(Commission  
File Number)

38-2394784  
(IRS Employer  
Identification No.)

1653 East Maple Road, Troy, Michigan  
(Address of principal executive offices)

48083-4208  
(Zip Code)

Registrant's telephone number, including area code

(248) 689-3050

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 communication pursuant to Rule 425 under the Securities Act.
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act.
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act.
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act.
-

Item 7.01. Regulation FD Disclosure

On August 10, 2009, Somanetics Corporation announced that it has filed a patent infringement action against CAS Medical Systems, Inc. in the United States District Court for the Eastern District of Michigan. A copy of the press release is furnished with this report following the signature page and is incorporated in this Item 7.01 by reference. The information in this report and the attached press release shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly stated by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits

| Exhibits | Description                        |
|----------|------------------------------------|
| 99.1     | News release dated August 10, 2009 |

---

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.

Dated: August 10, 2009

SOMANETICS CORPORATION  
(Registrant)

By: /s/ Mary Ann Victor  
Mary Ann Victor

Its: Vice President and Chief  
Administrative Officer and Secretary

---

EXHIBIT INDEX

| Exhibits | Description                        |
|----------|------------------------------------|
| 99.1     | News release dated August 10, 2009 |