

**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):  
March 5, 2009**

---

**MONOLITHIC POWER SYSTEMS, INC.**

(Exact name of Registrant as specified in its charter)

---

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**000-51026**  
(Commission File Number)

**77-0466789**  
(I.R.S. Employer  
Identification Number)

**6409 Guadalupe Mines Road, San Jose, CA 95120**  
(Address of principal executive offices) (Zip Code)

**(408) 826-0600**  
(Registrant's telephone number, including area code)

---

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 March 5, 2009, in the case of Monolithic Power Systems, Inc. v. O2Micro International Limited (“O2”), the United States Court of Appeals for the Federal Circuit affirmed the judgment from the United States District Court for the Northern District of California that all of the claims of US Patent No. 6,396,722 asserted against MPS and its customers were invalid on the grounds of obviousness. The Court also dismissed O2’s action and overturned a judgment in the Eastern District Court of Texas against Taiwan Sumida Electronics, Inc., a customer of MPS, on the basis that O2 cannot assert the same invalid claims. A press release is attached hereto as Exhibit 99.1.

**Item 9.01. Financial Statements and Exhibits****(d) Exhibits.**

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release issued on March 6, 2009 announcing the decision of the United States Court of Appeals for the Federal Circuit to affirm the decision of the United States District Court for the Northern District of California in favor of Monolithic Power Systems, Inc. and its customers.

---

## EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release issued on March 6, 2009 announcing the decision of the United States Court of Appeals for the Federal Circuit to affirm the decision of the United States District Court for the Northern District of California in favor of Monolithic Power Systems, Inc. and its customers.

## SIGNATURES

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

Date: March 9, 2009

By: /s/ C. Richard Neely, Jr.  
**C. Richard Neely, Jr.**  
**Chief Financial Officer**  
**(Principal Financial and Accounting Officer and**  
**Duly Authorized Officer)**

**Monolithic Power Systems, Inc.**  
6409 Guadalupe Mines Road  
San Jose, CA 95120 USA  
T: 408-826-0600, F: 408-826-0601  
[www.monolithicpower.com](http://www.monolithicpower.com)

### **MPS Announces Complete Victory in Patent Dispute Against O2 Micro**

**SAN JOSE, Calif., March 6, 2009** — Monolithic Power Systems (MPS) (Nasdaq: MPWR), a leading fabless manufacturer of high-performance analog and mixed-signal semiconductors, today announced two rulings by the United States Court of Appeals for the Federal Circuit, which resulted in a complete victory for MPS and its customers in ongoing patent litigations with O2 Micro International, Ltd. (O2).

In the first ruling, the Court affirmed the judgment from the United States District Court of Northern California that all of the claims of US Patent No. 6,396,722 (the '722 Patent) asserted against MPS and its customers were invalid on the grounds of obviousness. In the second ruling, the Court dismissed O2's action and overturned a judgment in the Eastern District Court of Texas against Taiwan Sumida Electronics, Inc., an MPS customer, on the basis that O2 cannot assert the same invalid claims.

"We are delighted by the results announced today," said Michael Hsing, CEO of MPS. "O2 Micro has been harassing MPS and MPS customers far too long, asserting meritless claims." MPS has successfully defended several of O2's patents from the same family as the '722 patent. He continued, "Today's rulings confirm what we have said all along —those claims should never have been asserted against us or our customers because they are invalid."

In December 2008, O2 instituted another action alleging patent infringement of several claims from Patent No. 7,417,382 (the '382 patent) against MPS and several customers before the United States International Trade Commission. The 382 patent belongs to the same family as the '722 patent that the Court found invalid. Proceedings regarding the '382 patent are also pending in the Northern District Court of California.

### **About Monolithic Power Systems, Inc.**

Monolithic Power Systems, Inc. (MPS) develops and markets proprietary, advanced analog and mixed-signal semiconductors. The company combines advanced process technology with its highly experienced analog designers to produce high-performance power management integrated circuits (ICs) for DC to DC converters, LED drivers, Cold Cathode Fluorescent Lamp (CCFL) backlight controllers, Class D audio amplifiers, and Linear ICs. MPS products are used extensively in computing and network communications products, LCD monitors and TVs, and a wide variety of consumer and portable electronics products. MPS partners with world-class manufacturing organizations to deliver top quality, ultra-compact, high-performance solutions through the most productive, cost-efficient channels. Founded in 1997 and headquartered in San Jose, California, the company has expanded its global presence with sales offices in Taiwan, China, Korea, Japan, and Europe, which operate under MPS International, Ltd.

###

Monolithic Power Systems, MPS, and the MPS logo are registered trademarks of Monolithic Power Systems, Inc. in the U.S. and trademarked in certain other countries.

**Contact:**  
Rick Neely  
Chief Financial Officer  
Monolithic Power Systems, Inc.  
408-826-0777  
[investors@monolithicpower.com](mailto:investors@monolithicpower.com)