#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington D.C. 20549

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): April 6, 2007

# **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 April 6, 2007, the United States Court of Appeals for the Federal Circuit affirmed a judgment entered in March 2006 in the litigation captioned *O2 Micro International Limited v. Monolithic Power Systems, Inc.,* Nos. CV-00-4071 and CV-01-3995 (N.D. Cal.), *on appeal as* Nos. 2006-1338 & -1377 (Fed. Cir.). The Federal Circuit upheld the district court's decision to vacate a jury's award to O2 Micro of \$12 million in unjust enrichment damages for trade secret misappropriation and to replace that award with a significantly reduced royalty. As affirmed, the judgment against MPS is for approximately \$3.36 million, which includes interest to date. In addition, the Federal Circuit affirmed the jury's verdict rejecting patent claims that MPS had brought against O2 Micro.

#### Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit	Description
99.1	Judgment on appeal from the United States District Court for the Northern District of California

#### 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: April 11, 2007

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

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# Exhibit

Description

99.1 Judgment on appeal from the United States District Court for the Northern District of California

NOTE: This disposition is nonprecedential.

## United States Court of Appeals for the Federal Circuit

2006-1338, -1377

#### 02 MICRO INTERNATIONAL LIMITED

Plaintiff/Counterclaim Defendant-Cross Appellant,

and

### 02 MICRO, INC.,

Counterclaim Defendant-Cross Appellant,

v.

MONOLITHIC POWER SYSTEMS, INC.,

Defendant/Counterclaimant-Appellant.

# Judgment

ON APPEAL from the United States District Court for the Northern District of California in CASE NO(S). 00-CV-4071 This CAUSE having been heard and considered, it is ORDERED and ADJUDGED:

AFFIRMED. See Fed. Cir. R. 36.

Per Curiam (MICHEL, Chief Judge, ARCHER, Senior Judge, and DYK, Circuit Judge.

DATED APR - 6 2007

ENTERED BY ORDER OF THE COURT

/s/ Jan Horbaly

Jan Horbaly, Clerk

FILED U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT

APR - 6 2007

JAN HORBALY CLERK