

SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. )

Monolithic Power Systems, Inc.

-----  
(Name of Issuer)

Common Stock (PAR VALUE .01 PER SHARE)

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(Title of Class of Securities)

609839105

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(CUSIP Number)

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page. The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1. Name of Reporting Person S.S. or I.R.S. Identification No. of Above Person  
Rainier Investment Management, Inc. I.R.S. No. 91-1457076

2. Check the Appropriate Box if a Member of a Group\*

(a)

(b)

3. SEC USE ONLY

4. Citizenship or Place of Organization: Seattle, Washington U.S.A.

5. Sole Voting Power 1,074,250

6. Shared Voting Power None

7. Sole Dispositive Power 1,153,380

8. Shared Dispositive Power None

9. Aggregate Amount Beneficially Owned by Each Reporting Person 1,153,380

10. Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares\* N/A

11. Percent of Class Represented by Amount in Row 9: 3.30%

12. Type or Reporting Person IA

ITEM 1.

(a) Name of Issuer: Monolithic Power Systems, Inc.

(b) Address of Issuer's Principal Executive Offices

6409 Guadalupe Mines Road, San Jose, CA 95120

ITEM 2.

(a) Name of Person Filing

Rainier Investment Management, Inc.

(b) Address of Principal Business Office or, if none, Residence

601 Union Street, Suite 2801 Seattle, WA 98101

(c) Citizenship: Washington

(d) Title of Class of Securities: Common Stock (Par value .01 per share)

(e) CUSIP Number: 609839105

ITEM 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b), check whether the person filing is a:

(a)  Broker or Dealer registered under Section 15 of the Act

(b)  Bank as defined in section 3 (a) (6) of the Act

(c)  Insurance Company as defined in section 3(a) (19) of the Act

(d)  Investment Company registered under section 8 of the Investment Company Act of 1940

(e)  Investment Adviser registered under section 203 of Investment

Advisors Act of 1940

- (f)  Employee Benefit Plan, Pension Fund which is subject to the provisions of the Employee Retirement Income Security Act of 1974 or Endowment Fund; see Sec. 240.13d-1(b) (1) (ii) (F)
- (g)  Parent Holding Company, in accordance with Sec. 240.13d-1 (b) (ii) (G) (Note: See Item 7)
- (h)  Group, in accordance with Sec. 240.13d-1 (b) (1) (ii) (H)

Item 4. Ownership

If the percent of class owned, as of December 31 of the year covered by the statement, or as of the last day of any month described in Rule 13d-1 (b) (2), if applicable, exceeds five percent, provide the following information as of that date and identify those shares which there is a right to acquire.

- (a) Amount Beneficially Owned 1,153,380
- (b) Percent of Class 3.30%
- (c) Number of shares as to which such person has:
- (i) sole power to vote or to direct the vote 1,074,250
- (ii) shared power to vote or to direct the voted None
- (iii) sole power to dispose or to direct the disposition of 1,153,380
- (iv) shared power to dispose or to direct the disposition of None

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [X].

Item 6. Ownership of more than Five Percent on Behalf of Another Person.

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than five percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

Not Applicable.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company. If a parent holding company has filed this schedule, pursuant to Rule 13d-1(b)

(ii) (G), so indicated under Item 3 (g) and attach an exhibit stating the identity and the Item 3 classification of the relevant subsidiary. If a parent holding company has filed this schedule pursuant to Rule 13d-1 (c), attach an exhibit stating the identification of the relevant subsidiary.

Not Applicable.

Item 8. Identification and Classification of Members of the Group

If a group has filed this schedule pursuant to Rule 13d-1(b) (ii) (H), so indicate under item 3 (h) and attach an exhibit stating the identity and Item 3 classification of each member of the group. If a group has filed this schedule pursuant to Rule 13d-1 (c) attach an exhibit stating the identity of each member of the group.

Not Applicable.

Item 9. Notice of Dissolution of Group

Notice of dissolution of a group may be furnished as an exhibit stating the date of dissolution and that all further filings with respect to transactions in the security reported on will be filed, if required, by members of the group, in their individual capacity. See Item 5.

Not Applicable.

Item 10. Certification

The following certification shall be included if the statement is filed pursuant to Rule 13d-1(b):

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired in the ordinary course of business and were not acquired for the purpose of and do not have the effect of changing or influencing the control of the issuer of such securities and were not acquired in connection with or as a participant in any transaction having such purposes or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief,

I certify that the information set forth in this statement is true,  
complete and correct

Signature

Katherine M. Stephens, Compliance Supervisor

DATE: FEBRUARY 12, 2010

Katherine M. Stephens, Compliance Supervisor