

FORM 3

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

| OMB APPROVAL | |
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| OMB Number: | 3235-0104 |
| Estimated average burden hours per response... | 0.5 |

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

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|---|---------------------|--|---|--|--|
| 1. Name and Address of Reporting Person * MARXE AUSTIN W & GREENHOUSE DAVID M | | 2. Date of Event Requiring Statement (Month/Day/Year) 01/30/2015 | 3. Issuer Name and Ticker or Trading Symbol Ideal Power Inc. [IPWR] | | |
| (Last) C/O SPECIAL SITUATIONS FUNDS, 527 MADISON AVENUE, SUITE 2600 | (First) AUSTIN W | | (Middle) GREENHOUSE DAVID M | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable) ____ Director <input checked="" type="checkbox"/> 10% Owner ____ Officer (give title below) ____ Other (specify below) | 5. If Amendment, Date Original Filed(Month/Day/Year) |
| (Street) NEW YORK, NY 10022 | | | 6. Individual or Joint/Group Filing(Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person | | |
| (City) | (State) | (Zip) | Table I - Non-Derivative Securities Beneficially Owned | | |

| 1. Title of Security (Instr. 4) | 2. Amount of Securities Beneficially Owned (Instr. 4) | 3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5) | 4. Nature of Indirect Beneficial Ownership (Instr. 5) |
|---------------------------------|---|--|---|
| Common Stock | 1,146,935 (1) (2) | I (1) (2) | By Limited Partnerships (1) (2) |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

SEC 1473 (7-02)

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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 4) | 2. Date Exercisable and Expiration Date (Month/Day/Year) | | 3. Title and Amount of Securities Underlying Derivative Security (Instr. 4) | | 4. Conversion or Exercise Price of Derivative Security | 5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 5) | 6. Nature of Indirect Beneficial Ownership (Instr. 5) |
|--|--|-----------------|---|----------------------------|--|---|---|
| | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | |
| | | | | | | | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|---|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| MARXE AUSTIN W & GREENHOUSE DAVID M C/O SPECIAL SITUATIONS FUNDS 527 MADISON AVENUE, SUITE 2600 NEW YORK, NY 10022 | | X | | |

Signatures

| | |
|------------------|------------|
| Adam C. Stettner | 01/30/2015 |
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Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 5(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

This is a joint filing by Austin W. Marxe (Marxe), David M. Greenhouse (Greenhouse) and Adam C. Stettner (Stettner). Special Situations Fund III QP, L.P. (SSFQP), Special Situations Cayman Fund, L.P. (CAYMAN), Special Situations Technology Fund, L.P. (TECH) and (1) Special Situations Technology Fund II, L.P. (TECH II and together with SSFQP, CAYMAN and TECH, the Funds) hold shares of Common Stock of the Issuer (the Shares). AWM Investment Company, Inc. (AWM), the investment adviser to the Funds, holds the power to vote and the power to dispose of the Shares held by each of the Funds.

Marxe, Greenhouse and Stettner are the controlling principals of AWM. While the Shares held by each of the Funds were previously reported by Marxe, Greenhouse and Stettner on Form 3, reference should be made to AWM (CIK #0001002856) for any future filings with the Securities and Exchange Commission relating to the Shares held by each of the Funds. Marxe, Greenhouse and Stettner disclaim (2) beneficial ownership of the Shares, except to the extent of their pecuniary interest therein. This report shall not be deemed an admission that Marxe, Greenhouse and Stettner are the beneficial owners of the Shares of the Issuer held by the Funds for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, or for any other purpose.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.