

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

FORM 8-A

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES

PURSUANT TO SECTION 12(b) OR 12(g) OF THE
SECURITIES EXCHANGE ACT OF 1934

IDEAL POWER INC.

(Exact name of registrant as specified in its charter)

Delaware

(State of incorporation or organization)

**5004 Bee Creek Road, Suite 600
Spicewood, Texas**

(Address of principal executive offices)

14-1999058

(I.R.S. Employer Identification No.)

78669

(Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

**Title of each class
to be so registered**

Common Stock,
\$0.001 par value per share

**Name of each exchange on which
each class is to be registered**

The NASDAQ Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box. []

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box. []

Securities Act registration statement file number to which this form relates: **File No. 333-190414**

Securities to be registered pursuant to Section 12(g) of the Act: None

Item 1. Description of Registrant's Securities to be Registered.

Ideal Power Inc. (the "Registrant") hereby incorporates by reference the description of its common stock, par value \$0.001 per share, to be registered hereunder that is contained under the heading "Description of Capital Stock" in the Registrant's Registration Statement on Form S-1 (File No. 333-190414), as originally filed with the Securities and Exchange Commission (the "Commission") on August 6, 2013 and as subsequently amended (the "Registration Statement"), and in the prospectus included in the Registration Statement to be filed separately by the Registrant with the Commission pursuant to Rule 424(b) under the Securities Act of 1933, as amended, which prospectus shall be deemed to be incorporated by reference herein.

Item 2. Exhibits.

Pursuant to the Instructions as to exhibits with respect to Form 8-A, no exhibits are required to be filed herewith because no other securities of the Registrant are registered on The NASDAQ Stock Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

November 21, 2013

IDEAL POWER INC.

By: /s/ Paul Bundschuh
Paul Bundschuh, Chief Executive Officer

