

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM S-8  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

**Ekso Bionics Holdings, Inc.**

(Exact name of registrant as specified in its charter)

<p style="text-align: center;"><b>Nevada</b> (State or other jurisdiction of incorporation or organization) <b>1414 Harbour Way, Suite 1201</b> <b>Richmond, California</b> (Address of Principal Executive Offices)</p>	<p style="text-align: center;"><b>99-0367049</b> (I.R.S. Employer Identification No.)  <b>94804</b> (Zip Code)</p>
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**Amended and Restated 2014 Equity Incentive Plan**  
(Full Title of the Plan)

**Jack Peurach, CEO**  
**Ekso Bionics Holdings, Inc.**  
**1414 Harbour Way, Suite 1201**  
**Richmond, CA 94804**  
**(510) 984-1761**  
(Name, address and telephone number, including area code, of agent for service)

Copy to:  
Michael J. O'Donnell, Esq.  
Alfredo B. D. Silva, Esq.  
Morrison & Foerster, LLP  
755 Page Mill Road  
Palo Alto, CA 94304  
(650) 813-5600

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>		Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)		Smaller reporting company	<input type="checkbox"/>
			Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee (2)
Common stock, \$0.001 par value per share:				
—Amended and Restated 2014 Equity Incentive Plan	4,400,000	\$ 1.69	\$ 7,436,000	\$ 925.78
<b>TOTAL:</b>	<b>4,400,000</b>		<b>\$ 7,436,000</b>	<b>\$ 925.78</b>

- (1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover an indeterminate number of additional shares of the registrant's common stock that become issuable under the Amended and

Restated 2014 Equity Incentive Plan, as amended (the “Plan”), by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without receipt of consideration that increases the number of the Registrant’s outstanding shares of common stock.

- (2) Estimated in accordance with Rules 457(c) and (h) of the Securities Act solely for the purpose of calculating the registration fee on the basis of \$1.69, the average of the high and low prices of the Registrant’s common stock as reported on the Nasdaq Capital Market on June 26, 2018.
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**EXPLANATORY NOTE; INCORPORATION BY REFERENCE OF CONTENTS OF REGISTRATION STATEMENTS ON  
FORMS S-8 (NO. 333-220808; NO. 333-207131; NO. 333-198357)**

This Registration Statement registers additional securities of the same class as other securities for which registration statements filed on Forms S-8 relating to Ekso Bionics Holdings, Inc.'s Amended and Restated 2014 Equity Incentive Plan (the "Plan") are already effective. Pursuant to Instruction E to Form S-8, we incorporate by reference into this Registration Statement the contents of (a) the registration statement on Form S-8 (File No. 333-198357) that we filed with the Securities and Exchange Commission (the "SEC") on August 26, 2014 relating to the registration of 2,058,571 shares of our common stock authorized for issuance under the Plan (taking into account a 1-for-7 reverse stock split on May 4, 2016), (b) the registration statement on Form S-8 (File No. 333-207131) that we filed with the SEC on September 25, 2015, relating to the registration of 1,655,714 shares of our common stock authorized for issuance under the Plan (taking into account a 1-for-7 reverse stock split on May 4, 2016), and (c) the registration statement on Form S-8 (File No. 333-220808) that we filed with the SEC on October 4, 2017, relating to the registration of 1,000,000 shares of our common stock authorized for issuance under the Plan, in each case, in their entirety and including exhibits thereto. This Registration Statement provides for the registration of an additional 4,400,000 shares of common stock to be issued under the Plan. These 4,400,000 shares represent an increase in the number of shares of common stock reserved for issuance under the Plan, which increase was approved by the stockholders on December 21, 2017 at a special meeting of stockholders of Ekso Bionics Holdings, Inc. and ratified again on June 7, 2018 at the 2018 annual meeting of stockholders. As a result of the foregoing, the number of shares of common stock reserved under the Plan is now 9,114,285 (taking into account a 1-for-7 reverse stock split on May 4, 2016).

**PART II  
INFORMATION REQUIRED IN THE  
REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference.**

The registrant hereby incorporates by reference into this Registration Statement the following documents previously filed with the Securities and Exchange Commission:

- (a) The registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on March 13, 2018;
- (b) The registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2017, filed with the SEC on May 7, 2018;
- (c) The registrant's Current Reports on Form 8-K, filed with the SEC on January 26, 2018, March 28, 2018, May 15, 2018 and June 12, 2018; and
- (d) The description of the registrant's common stock contained in the Registrant's Registration Statement on Form 8-A (File No. 001-37854) filed with the SEC on August 8, 2016, pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including any amendment or report filed for the purpose of updating such description.

All documents filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents; *provided, however*, that documents or information deemed to have been furnished and not filed in accordance with the rules of the SEC shall not be deemed incorporated by reference into this Registration Statement. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

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**Item 8. Exhibits.**

<i>Exhibit No.</i>	<i>Description of Exhibit</i>
<u>4.1</u>	<u>Certificate of Amendment to Articles of Incorporation of the Registrant, filed on December 22, 2017 (incorporated by reference from Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on December 27, 2017)</u>
<u>5.1*</u>	<u>Opinion of Morrison &amp; Foerster LLP</u>
<u>23.1*</u>	<u>Consent of Morrison &amp; Foerster LLP (included in Exhibit 5.1)</u>
<u>23.2*</u>	<u>Consent of OUM &amp; Co, LLP</u>
<u>24.1*</u>	<u>Power of Attorney (included in the signature page to this Registration Statement)</u>
<u>99.1</u>	<u>The Registrant's Amended and Restated 2014 Equity Incentive Plan (incorporated by reference from Appendix B to Registrant's Definitive Proxy Statement on Schedule 14A, dated April 30, 2018, filed on April 30, 2018)</u>

\* Filed herewith.

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Richmond, State of California, on July 2, 2018.

### EKSO BIONICS HOLDINGS, INC.

By: /s/ Jack Peurach  
Jack Peurach  
Chief Executive Officer  
(principal executive officer)

### SIGNATURES AND POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Jack Peurach and Maximilian Scheder-Bieschin, or either one of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his or her name, place and stead, in any and all capacities, to sign any or all further amendments or supplements (including post-effective amendments filed pursuant to Rule 462(b) of the Securities Act of 1933, as amended) to this registration statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent or either one of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully as to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents, or any of them, or his substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<b>Signatures</b>	<b>Title</b>	<b>Date</b>
/s/ Jack Peurach Jack Peurach	Director and Chief Executive Officer (principal executive officer)	July 2, 2018
/s/ Maximilian Scheder-Bieschin Maximilian Scheder-Bieschin	Chief Financial Officer (principal financial and accounting officer)	July 2, 2018
/s/ Steven Sherman Steven Sherman	Director	July 2, 2018
/s/ Marilyn Hamilton Marilyn Hamilton	Director	July 2, 2018
/s/ Charles Li Charles Li	Director	July 2, 2018
/s/ Stanley Stern Stanley Stern	Director	July 2, 2018
/s/ Theodore Wang Theodore Wang	Director	July 2, 2018

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July 2, 2018

Ekso Bionics Holdings, Inc.  
1414 Harbour Way, Suite 1201  
Richmond, CA 94804

**Registration Statement on Form S-8**

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-8 (the "Registration Statement") filed by Ekso Bionics Holdings, Inc. (the "Company") with the Securities and Exchange Commission (the "Commission") on July 2, 2018, relating to the registration under the Securities Act of 1933, as amended, of an aggregate of 4,400,000 shares of the Company's Common Stock (the "Shares"), which will be issuable under the Company's Amended and Restated 2014 Equity Incentive Plan, as amended (the "Plan").

As your counsel in connection with the Registration Statement, we have examined the proceedings taken by you and proposed to be taken by you in connection with the adoption of the Plan and the authorization, issuance and sale of the Shares under the Plan, and such documents, matters of fact and questions of law as we have deemed necessary to render this opinion. For the purpose of the opinion rendered below, we have assumed that such proceedings are timely completed in the manner presently proposed by you and that, upon each issuance of Shares, the Company will receive the consideration for such Shares required by the terms of the Plan.

Based upon and subject to the foregoing, we are of the opinion that the Shares, when issued and outstanding pursuant to the terms of the Plan, will be legally and validly issued, fully paid and non-assessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us in the Registration Statement and in any amendment thereto.

Very truly yours,

/s/ Morrison & Foerster LLP  
Morrison & Foerster LLP

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statement on Form S-8 pertaining to the Ekso Bionics Holdings, Inc. Amended and Restated 2014 Equity Incentive Plan, as amended, of our reports dated March 13, 2018, relating to the consolidated financial statements and the effectiveness of internal control over financial reporting of Ekso Bionics Holdings, Inc. included in its Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission.

/s/ OUM & CO. LLP

San Francisco, California  
July 2, 2018

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