

January 6, 2017

Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Attn: Terence O'Brien, Accounting Branch Chief

Re: Ekso Bionics Holdings, Inc.

Form 10-K for the Fiscal Year Ended Dec. 31, 2015

Filed March 14, 2016 File No. 000-55442

Ladies and Gentlemen:

We are in receipt of the comments of the staff of the Securities and Exchange Commission (the "SEC") provided by a letter dated December 13, 2016. The comment letter relates to the above-referenced Form 10-K for the Fiscal Year Ended December 31, 2015 (the "10-K") as filed by Ekso Bionics Holdings, Inc. (the "Company").

For your convenience, each staff comment is presented below in italics, with the Company's response immediately following in regular type.

General

1. Please file the License and Services Agreement dated October 27, 2014 between Ekso and OttoBock to which you refer in your response letter. If this agreement has been previously filed, please tell us when and include this agreement in any future exhibit index

The Company has not previously filed the License and Services Agreement between the Company and OttoBock Healthcare Product GmbH ("OttoBock") dated October 27, 2014 (the "OttoBock Agreement") because the Company does not deem it to be a material agreement as defined in Item 601 of Regulation S-K under the Securities Act of 1933, as amended. Specifically, the Company does not believe that the OttoBock Agreement is material to the Company because the license of intellectual property only permits OttoBock to practice the Company's patents and know-how in the limited field of medical prosthetics products which replace missing human limbs. The Company has no intention of practicing in such field, and accordingly the exclusive out-license of intellectual property in such field does not limit the Company's ability to pursue its business plans and is therefore not material to the Company. Notwithstanding the foregoing, in the event that the Company were to receive material compensation from OttoBock under the OttoBock Agreement, the Company understands that the OttoBock Agreement would then be considered to be a material agreement and would be required to be filed as an exhibit to its reports under the Securities Exchange Act of 1934, as amended. To date, the Company has not received any royalties under the OttoBock Agreement. The only compensation that has been received by the Company under the OttoBock Agreement consists of an exclusivity fee equal to \$250,000 paid on the effective date of the OttoBock Agreement and an annual exclusivity fee equal to \$100,000 on each of the first and second anniversaries of the effective date. The Company is also entitled to an exclusivity fee equal to \$150,000 on each of the third and fourth anniversaries of the effective date of the OttoBock Agreement. In the event that the Company begins receiving royalties under the Agreement, it will reevaluate the materiality of the OttoBock Agreement and file it as an exhibit if it is determined to be a material agreement at that point. In addition, the Company agrees to annually reevaluate the materiality of the OttoBock Agreement generally in light of any changes in the Company's planned uses of its intellectual property.

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The Company acknowledges that it is responsible for the adequacy and accuracy of its disclosure, notwithstanding any review, comments, action or absence of action by the staff.

Please feel free to contact the undersigned at 707-324-9509 if you have any question relating to the Form 10-K or this letter.

Sincerely,

/s/ Max Scheder-Bieschin

Max Scheder-Bieschin

cc: Securities and Exchange Commission
Kathryn McHale
Jay Ingram

Ekso Bionics Holdings, Inc. Thomas Looby

Nutter, McClennen & Fish, LLP Michelle L. Basil Erin M. Anderman