

## **EXHIBIT 32**

**TO DECLARATION OF CHRISTIANA GARRETT  
IN SUPPORT OF NUVASIVE, INC.'S  
REPLY IN SUPPORT OF  
MOTION FOR PARTIAL SUMMARY JUDGMENT  
AND MOTION TO EXCLUDE EXPERT OPINIONS  
(IMPLANT PATENTS)**

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF CALIFORNIA  
SAN DIEGO DIVISION

NUVASIVE, INC.,

Plaintiff,

v.

ALPHATEC HOLDINGS, INC. and  
ALPHATEC SPINE, INC.,

Defendants.

CASE NO. 18-cv-00347-CAB-MDD

**UPDATED SUPPLEMENTAL REBUTTAL EXPERT REPORT**  
**OF KEITH R. UGONE, PH.D.**

**February 4, 2021**

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**I. OVERVIEW OF ASSIGNMENT**

1. I have been retained as an economics and damages expert for Alphatec Holdings, Inc. and Alphatec Spine, Inc. (“Alphatec” or “Defendants”) in the matter of *NuVasive, Inc. v. Alphatec Holdings, Inc. and Alphatec Spine, Inc.*<sup>1</sup> On December 18, 2020, I submitted a supplemental rebuttal expert report (the “Ugone Supplemental Rebuttal Report”) in which I, among other things, (a) independently assessed the claimed royalty damages owned by Alphatec should the Access Patents, Implant Patents, and/or a combination of Implant and Access Patents be found to be valid, enforceable, and infringed and (b) evaluated NuVasive’s claimed damages as presented in the report submitted by Mr. English on November 20, 2020 (the “English Supplemental Damages Report”).<sup>2</sup>
2. On January 11, 2021, Mr. English issued an update to his supplemental report (the “Updated English Supplemental Damages Report”) in which he updated and/or corrected certain of his calculations and schedules. These updates and corrections accounted for the “claim-specific size requirements under the ’334 Patent, correction of a formulaic error on Schedule 6C, presentation of damages for multiple patents in Schedules 25 and 26” and provided “other clarification.”<sup>3</sup> Specifically, Mr. English:
  - a. separately calculated damages for Claim 16 and Claim 18 of the ’334 Patent;
  - b. changed the definition of a “functional unit” order;

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<sup>1</sup> Amended Complaint for Patent Infringement dated September 13, 2018 (“Amended Complaint”).

<sup>2</sup> Supplemental Rebuttal Expert Report of Keith R. Ugone, Ph.D. dated December 18, 2020 (“Ugone Supplemental Rebuttal Report”).

<sup>3</sup> Updated Supplemental Expert Report of Blake English dated January 11, 2021 (“English Updated Supplemental Report”), p. 1.

Updated Supplemental Rebuttal Expert Report of Keith R. Ugone, Ph.D.  
February 4, 2021

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- c. specified the criteria he utilized to determine whether a surgeon-customer was “diverted” by Alphatec; and
  - d. corrected his calculations of incremental profits and incremental costs related to “Mixed Orders.”<sup>4</sup>
3. I have been requested by counsel for Alphatec to (a) respond to the updates and corrections in the English Updated Supplemental Damages Report and (b) provide any associated updates (or corrections) to my calculations (and associated exhibits and tables) as reflected in the two sets of exhibits to my report that are detailed below.
4. As a result of Mr. English’s changed definition of functional unit orders,<sup>5</sup> I have prepared (a) Set 1 of Exhibits (and associated updated tables from the Ugone Supplemental Rebuttal Report) and (b) Set 2 of Exhibits (and associated updated tables from the Ugone Supplemental Rebuttal Report).
- a. Set 1 Of Exhibits. Set 1 of Exhibits utilize Mr. English’s original definition of a functional unit order (i.e., an intradiscal shim is included in functional unit orders).<sup>6</sup>
  - b. Set 2 Of Exhibits. Set 2 of Exhibits utilize Mr. English’s changed definition of a functional unit order (i.e., no longer requiring the inclusion of an intradiscal shim in the order).<sup>7</sup>

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<sup>4</sup> In the Updated English Supplemental Damages Report, Mr. English updated his “Mixed” Order incremental profits calculation to “reflect a weighted-average calculation rather than simple-average calculation.” As a result, the damages figures Mr. English presented in his Updated Schedule 1 changed relative to Schedule 1 of the English Supplemental Damages Report. (See Updated English Supplemental Damages Report, pp. 1, 2, Updated Schedule 1, and Updated Schedule 6C. See also English Supplemental Damages Report, Schedule 1 and Schedule 6C.)

<sup>5</sup> As discussed in **Section III**, Mr. English stated that he changed “‘Functional unit combinations include orders with one or more units of each of the following: [A1 or A2], B, C, D, F, and G’ to ‘Functional unit combinations include orders with one or more units of each of the following: [A1 or A2], B, D, F, and G.’” (English Updated Supplemental Damages Report, p. 2 and Updated Schedule 4, Note 12.)

<sup>6</sup> Mr. English’s original definition of functional unit orders are orders containing one or more units of the following components: [A1 or A2], B, C, D, F, and G (i.e., (a) PEEK implant and/or porous titanium implant [A1 or A2], (b) light cable [B], (c) intradiscal shim [C], (d) dilator set [D], (e) NM clip [F], and (f) NM probe [G]).

<sup>7</sup> Mr. English’s changed definition of functional unit orders are orders containing one or more units of the following components: [A1 or A2], B, D, F, and G (i.e., (a) PEEK implant and/or porous titanium implant [A1 or A2], (b) light cable [B], (c) dilator set [D], (d) NM clip [F], and (e) NM probe [G]).

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