

EXHIBIT 31

**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)**


HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA
SAN DIEGO DIVISION

NuVasive, Inc.,)	
)	
Plaintiff,)	
)	
v.)	Case No. 18-cv-0347-CAB-MDD
)	
Alphatec Holdings, Inc. and Alphatec)	
Spine, Inc.,)	
)	
Defendants.)	
)	
)	
)	
)	
)	
)	
)	

SUPPLEMENTAL EXPERT REPORT OF BLAKE INGLISH - UPDATE
CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

January 11, 2021



 Blake B. English

HIGHLY CONFIDENTIAL – ATTORNEYS’ EYES ONLY

I UPDATE

1. Since submitting the Supplemental Expert Report of Blake English, dated November 20, 2020, I have updated my schedules, primarily related to 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 other clarifications. Included herein are a complete set of Schedules, which are intended to replace the Schedules included in the November 20, 2020 Supplemental Expert Report of Blake English. Below details the updates that have been made:

Schedule 1 - Supplemental

- Updated to reflect revised ‘334 patent damages for Claim 16 and Claim 18 separately

Schedule 1/1A/1B/1C/1D/1E/1F - Supplemental

- Updated to reflect changes resulting from Schedule 6C

Schedule 1G

- Updated into two schedules: Schedule 1G - Claim 16 and Schedule 1G - Claim 18 to reflect the revised number of PEEK units asserted to infringe either Claim 16 or Claim 18 of the ‘334 patent

Schedule 1H

- Changed the third sentence of footnote 4 from “This represents assumed additional cannibalization of PEEK by porous titanium for diverted surgeons of 181 units or 15% $[(1,224 - 1,043) / 1,224]$.” to “This represents assumed additional cannibalization of PEEK by porous titanium for diverted surgeons of 196 units or 17% $[(1,175 - 979) / 1,175]$.”

Schedule 2H

- Updated into two schedules: Schedule 2H - Claim 16 and Schedule 2H - Claim 18 to reflect the revised number of PEEK units asserted to infringe either Claim 16 or Claim 18 of the ‘334 patent

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Schedule 3B

- Added the following highlighted columns (and related footnotes 11 and 12):
 - Total Adjusted PEEK Implant Units ('334 Claim 16)
 - Total Adjusted PEEK Implant Units ('334 Claim 18)
 - Total PEEK Implant Units ('334 Claim 16)
 - Total PEEK Implant Units ('334 Claim 18)
 - Total PEEK Implant Sales ('334 Claim 16)
 - Total PEEK Implant Sales ('334 Claim 18)

Schedule 4 - Supplemental

- Updated footnote 10 to the following: “Order combinations identified as "Yes" represent order combinations that could potentially infringe the '334 Patent. I understand from counsel that infringement of the '334 Patent is limited to PEEK implants (Battalion or Transcend) with specific dimensions (length greater than 40 mm and length at least 2.5 times width for Claim 16 and 18 mm wide with length greater than 40 mm and length at least 2.5 times width for Claim 18). A list of the Alphatec parts that are asserted to infringe Claim 16 and Claim 18 of the '334 Patent are summarized on Schedule 17A - Supplemental.”
- Changed the first sentence of footnote 12 from “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.”

Schedule 5 - Supplemental

- Added the following sentence to the beginning of footnote 7: “Excluded surgeons as diverted based on one or more of the following criteria: no functional unit sale, total NuVasive implant units < 5, first Alphatec sale occurred in a prior quarter or the same quarter as first NuVasive sale, gap year before first Alphatec sale (NuVasive sales cease and there is a gap year before first Alphatec sale).”

Schedule 6C

- Highlighted amounts now reflect a weighted-average calculation rather than a simple-average calculation

Schedule 17A - Supplemental

- Added the following highlighted columns (and related footnotes 3 and 4):
 - '334 Claim 16
 - '334 Claim 18

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Schedule 25

- Updated to present three patent combinations: All Asserted Patents Infringe, All Access Patents Infringe, All Implant Patents Infringe
- Updated column headings, row descriptions, and footnotes to reflect the revised patent combinations presented
- Updated to reflect changes resulting from Schedule 6C

Schedule 26

- Added the following highlighted columns (and related footnotes 11 and 12):
 - Total PEEK Implant Units ('334 Claim 16)
 - Total PEEK Implant Units ('334 Claim 18)
 - Total Adjusted PEEK Implant Units ('334 Claim 16)
 - Total Adjusted PEEK Implant Units ('334 Claim 18)
 - Total PEEK Implant Sales ('334 Claim 16)
 - Total PEEK Implant Sales ('334 Claim 18)
- Added highlighted “Order Included/Excluded” columns and related footnotes 13, 14, and 15 to reflect the revised patent combinations presented in Schedule 25
- Updated to reflect changes resulting from Schedule 6C

Schedule 27

- Removed Schedule 27

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