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1
            UNITED STATES PATENT AND TRADEMARK OFFICE
            BEFORE THE PATENT TRIAL AND APPEAL BOARD
 2
 3
     MEDTRONIC, INC.,
        Petitioner,
 4
     vs.
     NUVASIVE, INC.,
 5
        Patent Owner.
     Patent Number:
                        8,361,156
6
     Issue Date:
                         January 29, 2013
                         IPR2013-00506
     Case:
 7
     MEDTRONIC, INC.,
8
        Petitioner,
     vs.
     NUVASIVE, INC.,
9
        Patent Owner.
10
     Patent Number:
                        8,187,334
                         May 29, 2012
     Issue Date:
11
     Case:
                         IPR2013-00507
12
     MEDTRONIC, INC.,
13
        Petitioner,
     vs.
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     NUVASIVE, INC.,
15
        Patent Owner.
     Patent Number:
                         8,187,334
16
     Issue Date:
                         May 29, 2012
     Case:
                         IPR2013-00508
17
18
          Deposition of RICHARD A. HYNES, M.D., F.A.C.S.,
          taken at 100 Rialto Place, Suite 700, Melbourne,
19
          Florida, commencing at 8:49 A.M., Tuesday,
20
21
          September 30, 2014, before ANTHONY TRUJILLO,
22
          RMR, CRR
23
     Job No. 1928485
24
     PAGES 1 - 190
25
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                                             Page 2
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| 1 | | I N D E X | |
|----|----------------------------------|-------------------------------------|--------|
| 2 | | | |
| 3 | WITNESS | | PAGE |
| 4 | CALLED BY THE | PATENT OWNER: | |
| 5 | RICHARD A. HY | NES, M.D., F.A.C.S. | 5 |
| 6 | DIRECT EXAMINATION BY MR. AMON 5 | | 5 |
| 7 | CROSS-EXAM: | INATION BY MR. SCHWARTZ | 187 |
| 8 | | | |
| 9 | | | |
| 10 | | NUVASIVE EXHIBITS | |
| 11 | The following | exhibits were marked for identifica | ation: |
| 12 | NUMBER | | PAGE |
| 13 | | | |
| 14 | NuVasive | Declaration of Dr. Theodore G. | 61 |
| 15 | Exhibit 2031 | Obenchain, M.D., IPR2014-00034, | |
| | | U.S. Patent 8,000,782 | |
| 16 | NuVasive | "The Relationship between Cross | 68 |
| 17 | Exhibit 2032 | Sectional Area and Strength of | |
| | | Back Muscles in Patients with | |
| 18 | | Chronic Low Back Pain | |
| 19 | NuVasive | Printout, U.S. News & World | 77 |
| 20 | Exhibit 2033 | Report | |
| | NuVasive | "Lumbar-Vertebral Body | 82 |
| 21 | Exhibit 2034 | Replacement | |
| 22 | NuVasive | "Lumbar - Minimally Invasive | 87 |
| | Exhibit 2035 | Approach (PLIF)" | |
| 23 | NuVasive | Deposition Transcript Excerpt, | 181 |
| 24 | Exhibit 2036 | Hallett Matthews | |
| 25 | | | |
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| 1 | | I N D E X | |
|-----|-------------|-------------------------------------|--------|
| 2 | (Continued) | | |
| 3 | The follow | ing exhibits were previously marked | for |
| | | identification and referenced: | |
| 4 | | | |
| | NUMBER | | PAGE |
| 5 | MSD 1001 | Declaration of Richard Hynes, | 99 |
| | | M.D., Regarding U.S. Patent No. | |
| 6 | | 8,187,334 | |
| 7 | MSD 1003 | United States Patent Application | 164 |
| | | Publication, Frey, et al. | |
| 8 | MSD 1023 | Document By Alphatec Spine, | 170 |
| | | Portal Access System Guided | |
| 9 | | Lumbar Interbody Fusion | |
| 10 | MSD 1055 | Second Declaration of Richard A. | 11 |
| | | Hynes, M.D., IPR2013-00507 | |
| 11 | MSD 1105 | Michelson '973 Patent | 142 |
| 12 | MSD 1115 | U.S. Patent No. 8,361,156 | 150 |
| 13 | MSD 1117 | "Posterior Lumbar Interbody | 144 |
| | | Fusion Using Posterolateral | |
| 14 | | Placement of a Single Cylindrical | |
| 15 | | Threaded Cage" | |
| 16 | MSD 1118 | Pre-Market Approval, | 172 |
| | | IPR2013-00506; IPR2013-00508; | |
| 17 | | Also Marked as Exhibit MSD 1016, | |
| | | 8/22/14 | |
| 18 | MSD 1132 | Maximum Access Surgery | 148 |
| 19 | | Transforaminal Lumbar Interbody | |
| | | Fusion, IPR2013-00506; | |
| 20 | | IPR2013-00508. Also Marked as | |
| | | MSD 1030, 8/22/14 | |
| 21 | MSD 1157 | Declaration of Richard A. Hynes, | 10 |
| | | M.D., IPR2013-00506 | 4.0 |
| 22 | MSD 1157 | Exhibit In Matter IPR2013-00508 | 12 |
| 23 | MSD 1173 | Excerpt of Transcript, | 340 |
| 24 | | Examination Under Oath of Hansen | |
| 2.5 | | A. Yuan, M.D. | |
| 25 | | | |
| | | | - A |
| | | | Page 4 |



| 1 | THEREUPON, the following proceedings were had | | |
|----|---|--|--|
| 2 | and taken at 8:49 a.m.: | | |
| 3 | THE REPORTER: Do you solemnly swear or affirm | | |
| 4 | that the testimony you are about to give shall be | | |
| 5 | the truth, the whole truth, and nothing but the | | |
| 6 | truth. | | |
| 7 | THE WITNESS: Yes. | | |
| 8 | RICHARD A. HYNES, M.D., F.A.C.S., | | |
| 9 | having been first duly sworn or affirmed, testified | | |
| 10 | under oath as follows: | | |
| 11 | MR. AMON: And, Jeff, I don't know if you want | | |
| 12 | to state your appearance for the record. | | |
| 13 | MR. SCHWARTZ: Jeff Schwartz from | | |
| 14 | Fox Rothschild for Medtronic, the Petitioner, and | | |
| 15 | the IPRs 2013506, '507, and '508. | | |
| 16 | MR. AMON: And Michael Amon of Fish & | | |
| 17 | Richardson on behalf of the Patent Owner, NuVasive, | | |
| 18 | in the same matters. | | |
| 19 | With me here today is Stuart Nelson, also with | | |
| 20 | Fish & Richardson. | | |
| 21 | DIRECT EXAMINATION | | |
| 22 | BY MR. AMON: | | |
| 23 | Q. Good morning, Dr. Hynes. | | |
| 24 | A. Good morning. | | |
| 25 | Q. Could you please state your full name for the | | |
| | Page 5 | | |



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