### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Curran et al.

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Title: SYSTEMS AND METHODS FOR SPINAL FUSION

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DECLARATION OF RICHARD A. HYNES, M.D. REGARDING U.S. PATENT NO. 8,361,156



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## I. INTRODUCTION AND SCOPE OF WORK

- 1. My name is Richard A. Hynes, M.D. I have been retained by petitioner Medtronic, Inc. in this *Inter Partes* Review ("IPR") as an independent expert in the relevant art.
- 2. I have been asked to provide my opinions and views on the materials I have reviewed in this IPR related to U.S. Patent No. 8,361,156 (the "156 patent"), and the scientific and technical knowledge regarding the same subject matter. I have been asked to consider what one of ordinary skill in the art would have understood from the '156 patent. I have also considered whether certain references disclose or suggest the features recited in the claims of the '156 patent. My opinions are set forth below.
- 3. My opinions are guided by my appreciation of how a person of ordinary skill in the art would have understood the claims of the '156 patent at the time of the alleged invention, which I have been asked to initially assume is March 29, 2004, the earliest filing date potentially attributable to the '156 patent.
- 4. Based on my experience and expertise it is my opinion that certain references as discussed in detail below disclose or suggest all the features recited in the claims of the '156 patent, that any differences from these prior references are trivial, and that these claims combine well known features to provide predictable results.



## II. PROFESSIONAL BACKGROUND

- 5. I am an orthopedic surgeon board certified by the American Board of Orthopaedic Surgery and trained in spine surgery. I earned a B.A. degree in Biology from Rutgers, my M.S. degree in Biology from American University, and my M.D. degree from Rutgers Medical School. I completed a general surgery internship and orthopedic residency at Tripler Army Medical Center in Honolulu, Hawaii and later completed a spine fellowship at Beth Israel Hospital in Boston. I am a diplomat of the American Board of Orthopaedic Surgery and the American Board of Spine Surgeons. I am currently president and a spine surgeon at The B.A.C.K. Center in Melbourne, Florida. Previously, I was the Chief of the Department of Surgery at the Holmes Regional Medical Center in Melbourne, Florida.
- 6. With respect to the specific subject matter at issue in this IPR, intervertebral spinal fusion, I have extensive experience. I have performed between 4000 to 5000 lumbar and cervical fusion procedures over the past 20 years. I have published several papers on the subject of spine surgery, and am a frequent instructor to visiting surgeons on spinal surgical approaches and techniques of spinal fusion. I consult for several spine companies in many areas, including design, development and surgical approaches and surgical instruction. A



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