BEFORE THE PATENT TRIAL AND APPEAL BOARD

MEDTRONIC, INC., MEDTRONIC VASCULAR, INC., and MEDTRONIC COREVALVE, LLC
Petitioner

v.

TROY R. NORRED, M.D. Patent Owner

Case IPR2014-00110, -00111 Patent 6,482,228

DECLARATION OF STEPHEN J. LOMBARDO

NORRED EXHIBIT 2196 - Page 1 Medtronic, Inc., Medtronic Vascular & Medtronic Corevalve, LLC v. Troy R. Norred, M.D. Case IPR2014-00111



Engineering, University of Missouri, Columbia, Missouri 65211

- 2. I am currently employed as a Professor in the Mechanical and Aerospace Engineering Department at the University of Missouri.
- 3. From 1997 until 2003, I was employed as an Assistant Professor in the Chemical Engineering Department at the University of Missouri.
- 4. In spring 2000, while I was employed as an assistant professor in the Chemical Engineering Department at the University of Missouri, I was approached by Dr. Troy R. Norred about a project he was working on concerning a prosthetic aortic valve adapted for percutaneous placement.
- 5. Dr. Norred explained to me his ideas about prosthetic aortic valve adapted for percutaneous placement and we discussed if I could supply an engineering perspective on this. These discussions lead the question of whether or not a prosthetic aortic valve could be held in place by a stent that was within the size range tolerated by the adult human anatomy without rupturing the aorta using mainly the frictional forces between the stent and the aorta. I indicated I could work on such a model if he provided me with detailed anatomical information.



of the model. The model addressed aspects of whether a prosthetic aortic valve could be held in place by a stent that was within the size range tolerated by the adult human anatomy. A copy of the model I provided to Dr. Norred is Exhibit 2084 and Exhibit 2185. My handwritten notes are Exhibit 2019 and Exhibit 2119.

In early-to-mid June, 2000, I worked on developing initial drafts

I hereby declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and accurate to the best of my knowledge and understanding.

Dated:

Stephen J. Lombardo