

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

MEDTRONIC, INC.  
Petitioner

v.

MOSKOWITZ FAMILY LLC.  
Patent Owner

---

Patent No. 11,864,755

---

**DECLARATION OF MR. BRAD CULBERT  
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW  
OF U.S. PATENT NO. 11,864,755**

## TABLE OF CONTENTS

|       |                                                                                                                                                                               |    |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| I.    | INTRODUCTION .....                                                                                                                                                            | 1  |
| II.   | BACKGROUND AND QUALIFICATIONS .....                                                                                                                                           | 1  |
| III.  | MATERIALS REVIEWED .....                                                                                                                                                      | 4  |
| IV.   | PERSON OF ORDINARY SKILL IN THE ART .....                                                                                                                                     | 7  |
| V.    | TECHNICAL BACKGROUND .....                                                                                                                                                    | 8  |
| A.    | Anatomy of the Spine and Vertebral Bodies.....                                                                                                                                | 8  |
| B.    | Vertebral Body Replacement Device.....                                                                                                                                        | 9  |
| VI.   | THE '755 PATENT .....                                                                                                                                                         | 14 |
| VII.  | CLAIM CONSTRUCTION .....                                                                                                                                                      | 16 |
| VIII. | THE PRIOR ART .....                                                                                                                                                           | 17 |
| A.    | Schäfer.....                                                                                                                                                                  | 17 |
| 1.    | Overview .....                                                                                                                                                                | 17 |
| 2.    | Schäfer Discloses a “Tool” that Rotates “About a Longitudinal<br>Axis of the Tool”to “Cause[] a Rotation of the Turning<br>Mechanism”.....                                    | 20 |
| 3.    | Schäfer in Combination with Yeh Discloses“Substantially<br>Conical Tips” .....                                                                                                | 26 |
| B.    | Yeh & Berry .....                                                                                                                                                             | 29 |
| 1.    | Overview of Yeh .....                                                                                                                                                         | 29 |
| 2.    | Overview of Berry.....                                                                                                                                                        | 30 |
| 3.    | Yeh in Combination with Berry Discloses or Suggests a “Tool”<br>That Rotates “About a Longitudinal Axis of the Tool”to<br>“Cause[] a Rotation of the Turning Mechanism” ..... | 33 |
| 4.    | A POSITA Would Have Been Motivated to Configure the<br>Perimeter of Yeh’s Shells to be Circular and Would Have<br>Expected Reasonable Success In Doing So .....               | 40 |
| IX.   | CONCLUSION.....                                                                                                                                                               | 45 |
|       | APPENDIX A.....                                                                                                                                                               | 46 |
|       | APPENDIX B .....                                                                                                                                                              | 74 |

Declaration of Mr. Brad Culbert  
U.S. Patent No. 11,864,755

|                  |     |
|------------------|-----|
| APPENDIX C ..... | 78  |
| APPENDIX D ..... | 80  |
| APPENDIX E ..... | 109 |
| APPENDIX F ..... | 111 |

I, Brad Culbert, declare as follows:

## **I. INTRODUCTION**

1. I have been retained as an independent expert consultant by Medtronic, Inc. (“Petitioner”) in this proceeding before the United States Patent and Trademark Office regarding U.S. Patent No. 11,864,755 (“the ’755 patent”) (Ex. 1001) assigned to Moskowitz Family LLC (“Patent Owner”).<sup>1</sup> I have been asked to consider whether prior art references disclose or suggest the features recited in claims 1-6, 8-12, and 17-20 (the “challenged claims”) of the ’755 patent. My opinions are set forth below.

2. I am being compensated at my standard rate for services provided in this matter and reimbursed for reasonable expenses, including travel. My compensation is not contingent upon my opinions, the outcome of this matter, or any of the technical positions I present in this declaration.

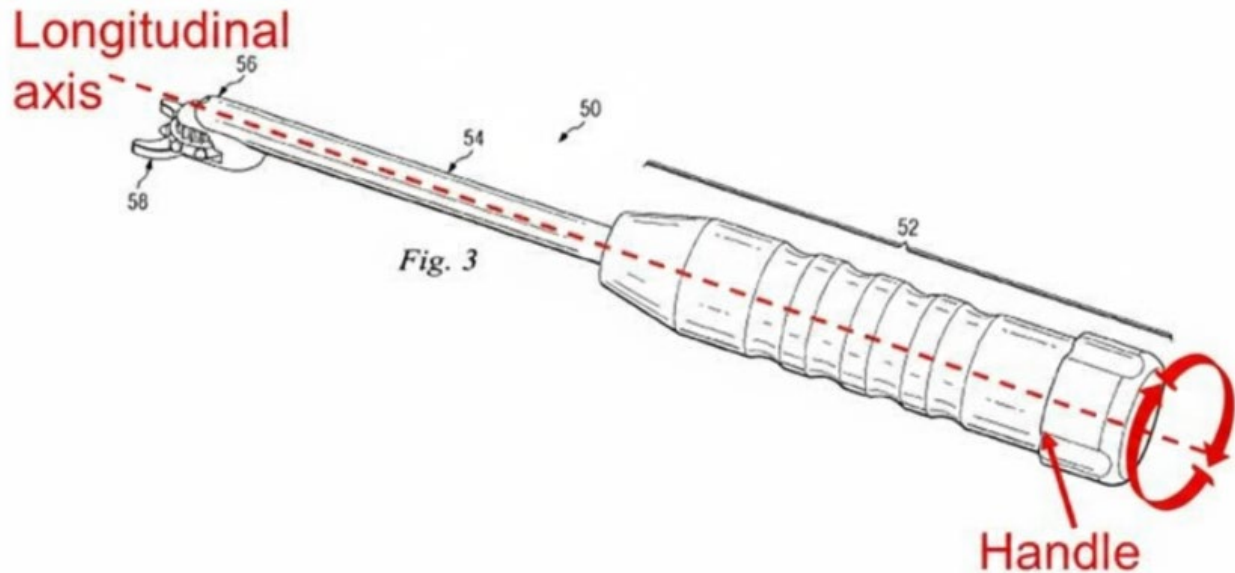
## **II. BACKGROUND AND QUALIFICATIONS**

3. My qualifications are stated more fully in my curriculum vitae (“CV”), which is attached as Exhibit 1003. My CV also lists patents and publications on

---

<sup>1</sup> In this Declaration, I refer to exhibits that I understand are to be attached to the petition for *Inter Partes* Review of the ’755 patent.

**rotating the tool about a longitudinal axis of the tool while the tool is engaged with the tool-engagement surface.”**



(*Id.*, Fig. 3 (annotated).)

56. Due to its bevel gear mechanism, “**rotating of the tool,**” *i.e.*, turning handle 64 of Berry’s expander apparatus 50, “**causes a rotation of the turning mechanism,**” *i.e.*, Berry’s tubular body, expanding the implant. (*See id.*, ¶¶21-22.) Berry thus discloses “**wherein the rotating of the tool causes a rotation of the turning mechanism.**”

57. A POSITA would have been motivated to combine the teachings of Yeh and Berry to utilize a tool like Berry’s to rotate Yeh’s adjustment ring 130. For example, a POSITA would have been motivated to use Berry’s expander apparatus 50 with Yeh’s spinal column fixation device, which includes an adjustment ring 130, because of the benefits that Berry’s expander apparatus 50 provides. As discussed

in Section V.B, while increasing the height of the implant, a surgeon would have tried to avoid surgical complications by minimally disturbing the surgical site. The prior art specifically recognized this motivation. For example, Schäfer specifically recognized the undesirability of using a tool for turning a rotating mechanism like Yeh's adjustment ring 30, where the tool "has to be removed and reinserted after it has made a certain turn, e.g., after a quarter turn, which is difficult or even impossible in a great number of surgical interventions." (Ex. 1010, 1:19-23.) Similarly, Berry taught that the use of prior art tools such as a wrench, "requires lateral translation which, in the confined area of the wound, can require an enlarged wound and increased labor and time." (Ex. 1009, ¶6.)

58. A POSITA would have been motivated to minimize trauma to the patient by using a tool with a handle that a surgeon could rotate about the tool's longitudinal axis to rotate the adjustment ring 130, like Berry's expander apparatus 50. According to Berry, actuation of its tool, "without the use of lateral movement[,] . . . reduc[es] the size of a patient's wound and decreas[es] the time and labor involved to complete the procedure." (*Id.*, ¶23.)

59. Additionally, a POSITA would have known that an insertion tool would be needed to deliver the implant to the intervertebral space. A tool that could be used for both insertion and expansion of the implant would be preferred because the use of multiple, separate tools could disrupt the patient's surgical opening and

**IX. CONCLUSION**

67. I declare that all statements made herein of my knowledge are true, and that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Dated: November 7, 2025

By: Brad Culbert

Brad Culbert