

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

MASIMO CORPORATION,
Patent Owner.

Case IPR2022-01291
U.S. Patent 10,687,745

SECOND SUPPLEMENTAL DECLARATION OF BRIAN W. ANTHONY

I, BRIAN W. ANTHONY, hereby declare the following:

1. I am over the age of 18, have personal knowledge of the facts set forth herein, and am competent to testify to the same.

2. I reviewed and cited to each of the following documents in analyzing the issues addressed in my second declaration (APPLE-1042):

APPLE-1038 ITC Inv. No. 337-TA-1276 Exhibit RX-0335 (U.S. Pat. No. 5,830,137 (“Scharf”))

APPLE-1039 ITC Inv. No. 337-TA-1276 Exhibit RX-0504 (Austin Wareing, Optimization of Reflectance-Mode Pulse Oximeter Sensors)

APPLE-1040 ITC Inv. No. 337-TA-1276 Exhibit RX-0508 (Jianchu Yao and Steve Warren, Stimulating Student Learning with a Novel “In-House” Pulse Oximeter Design (2005))

APPLE-1041 ITC Inv. No. 337-TA-1276 Exhibit RX-0632

APPLE-1043 Excerpt of The American Heritage Dictionary of the English Language, Fifth Edition, Houghton Mifflin Harcourt Publishing Company (2011)

APPLE-1044 Excerpt of Collins Dictionary, HarperCollins Publishers (2010)

APPLE-1045 Excerpt of Merriam-Webster’s Collegiate Dictionary, Eleventh Edition, Merriam-Webster, Incorporated (2014)

APPLE-1046 Excerpts from Bronzino, The Biomedical Engineering Handbook, CRC Press, Inc. (1995) (“Bronzino”)

APPLE-1048 Severinghaus et al., Recent Developments in Pulse Oximetry, Anesthesiology, Vol. 76, No. 6 (June 1992)

APPLE-1049 Duffy, MIO Alpha BLE Review, PC Magazine (Jan. 28, 2013) available at <https://www.pcmag.com/reviews/mio-alpha-ble>

- APPLE-1050 Pang et al., A Neo-Reflective Wrist Pulse Oximeter, IEEE Access, Volume 2 (January 12, 2015)
- APPLE-1051 Li et al., A Wireless Reflectance Pulse Oximeter With Digital Baseline Control for Unfiltered Photoplethysmograms, IEEE Transactions on Biomedical Circuits and Systems, Vol. 6, No. 3 (June 2012)
- APPLE-1052 U.S. Patent Application Publication No. 2006/0253010 to Brady et al.
- APPLE-1053 Cai et al., Implementation of a Wireless Pulse Oximeter Based on Wrist Band Sensor, 2010 3rd International Conference on Biomedical Engineering and Informatics (BMEI 2010)
- APPLE-1054 International Publication No. WO 2001/17421 to Lindberg et al.
- APPLE-1055 Maattala et al., Optimum Place for Measuring Pulse Oximeter Signal in Wireless Sensor-Belt or Wrist-Band, 2007 International Conference on Convergence Information Technology, IEEE (2007)
- APPLE-1056 Fontaine et al., Reflectance-Based Pulse Oximeter for the Chest and Wrist, Worcester Polytechnic Institute
- APPLE-1058 U.S. Patent No. 7,468,036 to Rulkov et al.
- APPLE-1069 ITC Inv. No. 337-TA-1276 Exhibit RX-0498 (Takatani et al., Optical Oximetry Sensors for Whole Blood and Tissue, IEEE Engineering in Medicine and Biology (June/July 1994))
- APPLE-1076 Beam Shaping with Cylindrical Lenses, *available at* <https://www.newport.com/n/beam-shaping-with-cylindrical-lenses>
- APPLE-1077 Dickey, Laser Beam Shaping Theory and Techniques, Second Edition, Taylor & Francis Group, LLC (2014)

APPLE-1078 Lee et al., Micro-LED Technologies and Applications, Information Display (June 2016)

3. I understand the foregoing exhibits to be true and correct copies of their respective publications, or excerpts of the respective publications. I also note that a number of the exhibits among APPLE-1043-1078 include indicia of authenticity, including copyright symbols, publisher details, publication dates, etc. that imply these exhibits are true and correct.

4. Each of the exhibits listed herein are of a type that an expert would rely upon in formulating opinions related to the respective issues for which have I cited those exhibits in my second declaration. These exhibits are consistent with my own knowledge of subject matter relevant to the '745 patent, and various exhibits further demonstrate a POSITA's knowledge of subject matter relevant to the '745 Patent as I explained in my second declaration. *See* APPLE-1003, APPLE-1042.

5. I currently hold the opinions set expressed in this Declaration. But my analysis may continue, and I may acquire additional information and/or attain supplemental insights that may result in added observations.

6. I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true; and further 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.

Respectfully submitted,

Date: September 12, 2023



BRIAN W. ANTHONY