

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,

Petitioner,

v.

MASIMO CORPORATION,

Patent Owner.

Case IPR2022-01299

U.S. Patent 7,761,127

DECLARATION OF WILLIAM P. KING, Ph.D.

I declare that all statements made herein on 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.

Dated: May 18, 2023

By: _____


William P. King, Ph.D.

1. I, William P. King, Ph.D., am making this declaration at the request of Patent Owner Masimo Corporation (“Masimo”) in the matter of the *Inter Partes* Review No. IPR2022-01299 of U.S. Patent No. 7,761,127 (“the ’127 patent”). I understand that this declaration is being submitted in this proceeding as Exhibit 2151.

2. I am being compensated for my work in this matter at my standard hourly rate for consulting services. My compensation in no way depends on the outcome of this proceeding.

3. In addition to my own knowledge and expertise, I have reviewed and considered the following written materials in conducting the analyses and forming the opinions set forth in this declaration.

Exhibit or Paper No.	Description
2	The Petition
1001	U.S. Patent No. 7,761,127 (“the ’127 patent”)
1002	Excerpts from the file history of the ’127 patent
1003	Declaration of Brian Anthony, Ph.D.
1004	Yamada
1005	Chadwick
1006	Leibowitz
1007	Cheung

Exhibit or Paper No.	Description
1008	Noguchi
1014	Scarlett
2005	“Rad-57 Signal Extraction Pulse CO-Oximeter Operator’s Manual,” Masimo, 2018
2017	“Material Qualification Henkel 84-1LMISR4 Die Attach Adhesive,” Masimo
2022	September 22, 2019 Masimo “Awards” Webpage
2023	“Masimo Honored with FDNY ‘Flag of Heroes’,” EMS1, 2008
2024	Photograph of “Flag of Heroes”
2025	Photograph of Masimo CEO Joe Kiani with “Flag of Heroes”
2026	U.S. Patent No. 5,758,644
2029	Masimo Rainbow Sensor Finger Assembly Photograph, Top Side (current rainbow®)
2030	Masimo Rainbow Sensor Finger Assembly Photograph, Bottom Side (current rainbow®)
2053	Design of Pulse Oximeters, J.G. Webster; Institution of Physics Publishing, 1997
2059	“Fine Ceramics for Electronics,” Kyocera, 2021
2060	“Thermal Properties of Metals, Conductivity, Thermal Expansion, Specific Heat,” Engineers Edge, available at https://www.engineersedge.com/properties_of_metals.htm

Exhibit or Paper No.	Description
2061	“Thermal Properties of Non-Metals,” Engineers Edge, available at https://www.engineersedge.com/heat_transfer/thermal_properties_of_nonmetals_13967.htm
2062	“Metals – Specific Heats,” The Engineering ToolBox, available at https://www.engineeringtoolbox.com/specific-heat-metals-d_152.html
2063	“Heat Capacities for Some Select Substances,” University of Texas, available at https://gchem.cm.utexas.edu/data/section2.php?target=heat-capacities.php
2064	“FR-4,” Wikipedia, available at https://en.wikipedia.org/wiki/FR-4
2065	“Talk:FR-4,” Wikipedia, available at https://en.wikipedia.org/wiki/Talk:FR-4
2066	“Thermal Conductivity of Solders,” Electronics Cooling, available at https://www.electronics-cooling.com/2006/08/thermal-conductivity-of-solders/
2067	PCT Pub. No. WO 03/068060 (“Huiku”)
2093	<i>Masimo Corp. et al. v. Apple Inc.</i> , Final Initial Determination on Violation of Section 337, ITC Inv. No. 337-TA-1276
2102	Declaration of Mohamed Diab (Confidential)
2103	December 15, 2005 Rainbow Sensor Simulations (Confidential)
2104	“Signal Extraction & Rainbow Technology,” Masimo, 2005 (Confidential)
2106	October 22, 2004 Masimo Rainbow Sensor Drawing (early rainbow®) (Confidential)

Exhibit or Paper No.	Description
2107	Masimo Rainbow Sensor Drawing (early rainbow®) (Confidential)
2109	December 16, 2016 Kyocera Substrate Drawing (Confidential)
2110	November 8, 2018 Rainbow Flex Circuit Drawing (Confidential)
2111	February 9, 2006 Rainbow Flex Circuit Drawing (Confidential)
2112	2007 Masimo MX-3 Board System Design (Confidential)
2113	2007 Masimo MX-3 Board Product Design Requirements, Revision A (Confidential)
2114	2010 Masimo MX-3 Board Product Design Requirements, Revision B (Confidential)
2115	2015 Masimo MX-3 Board Product Design Requirements, Revision F (Confidential)
2116	Masimo Rainbow Sensor Substrate, Exploded View (Confidential)
2118	PVIC ACE34560 Electrically Conductive Oven Cure Die Attach Adhesive Technical Data Sheet, Protavic Korea Co., Ltd. (Confidential)
2119	April 22, 2021 Masimo Rainbow Sensor Photographs (current rainbow ®) (Confidential)
2120	March 30, 2009 Masimo Rainbow Sensor Solder Drawing (Confidential)
2121	Masimo Rainbow Sensor Photograph (early rainbow®) (Confidential)
2127	December 5, 2008 Masimo Rainbow Sensor Substrate Drawing (current rainbow®) (Confidential)

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.