

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE INC.

Petitioner,

v.

MASIMO CORPORATION,

Patent Owner.

---

Case IPR2020-01713  
U.S. Patent 10,624,564

---

**PETITIONER'S REPLY TO PATENT OWNER RESPONSE**

## TABLE OF CONTENTS

I.	INTRODUCTION .....	7
II.	GROUND 1 ESTABLISHES OBVIOUSNESS .....	7
	A. Ohsaki does not teach or require that its translucent board 8 is “rectangular” in shape.....	12
	B. A POSITA would have recognized the benefits of Ohsaki’s teachings when applied to Aizawa’s sensor.....	16
	C. Modifying Aizawa’s sensor to include a convex cover as taught by Ohsaki enhances the sensor’s light-gathering ability .....	20
	D. A POSITA would have been motivated to select a convex cover to protect the optical elements .....	33
	E. A POSITA would have combined Aizawa and Ohsaki with Goldsmith.....	34
	F. The claimed protrusion height in claims 16 and 17 would have been obvious to a POSITA.....	34
III.	GROUND 2 ESTABLISHES OBVIOUSNESS .....	37
IV.	GROUND 3-6 ESTABLISH OBVIOUSNESS .....	40
V.	CONCLUSION.....	40

## EXHIBITS

APPLE-1001	U.S. Patent No. 10,624,564 to Jeroen Poeze, et al. (“the ‘564 Patent”)
APPLE-1002	Excerpts from the Prosecution History of the ‘564 Patent (“the Prosecution History”)
APPLE-1003	Declaration of Thomas Kenny
APPLE-1004	RESERVED
APPLE-1005	RESERVED
APPLE-1006	US Pub. No. 2002/0188210 (“Aizawa”)
APPLE-1007	JP Pub. No. 2006/296564 (“Inokawa”)
APPLE-1008	Certified English Translation of Inokawa and Translator’s Declaration
APPLE-1009	US Pub. No. 2001/0056243 (“Ohsaki”)
APPLE-1010	“A Wearable Reflectance Pulse Oximeter for Remote Physiological Monitoring,” Y. Mendelson, et al.; Proceedings of the 28th IEEE EMBS Annual International Conference, 2006; pp. 912-915 (“Mendelson-2006”)
APPLE-1011	US Pub. No. 2007/0093786 (“Goldsmith”)
APPLE-1012	<i>processor</i> , Merriam Webster’s Collegiate Dictionary, 10th Ed., Merriam Webster Inc., 1999
APPLE-1013	US Patent No. 4,941,236 (“Sherman”)
APPLE-1014	“Design and Evaluation of a New Reflectance Pulse Oximeter Sensor,” Y. Mendelson, et al., Medical Instrumentation, Vol. 22, No. 4, 1988; pp. 167-173 (“Mendelson-1988”)

APPLE-1015 US Pub. No. 2008/0194932 (“Ayers”)

APPLE-1016 U.S. Patent No. 7,558,622 (“Tran”)

APPLE-1017 U.S. Patent No. 6,351,217 (“Kuhns”)

APPLE-1018 U.S. Patent No. 7,656,393 (“King”)

APPLE-1019 U.S. Patent No. 6,584,336 (“Ali”)

APPLE-1020 US Pub. No. 2004/0054291 (“Schulz”)

APPLE-1021 Design of Pulse Oximeters, J.G. Webster; Institution of Physics Publishing, 1997 (“Webster”)

APPLE-1022 U.S. Patent No. 6,912,413 (“Rantala”)

APPLE-1023 U.S. Patent No. 7,251,513 (“Kondoh”)

APPLE-1024 US Pub. No. 2004/0152957 (“Stivoric”)

APPLE-1025 JP Pub. No. 2005-270543 (“Tanagi”)

APPLE-1026 Certified English Translation of Tanagi and Translator’s Declaration

APPLE-1027 to 1030 RESERVED

APPLE-1031 Scheduling Order, *Masimo v. Apple*, Case 8:20-cv-00048, Paper 37 (April 17, 2020)

APPLE-1032 Stipulation by Apple

APPLE-1033 Telephonic Status Conference, *Masimo v. Apple et al.*, Case 8:20-cv-00048, Paper 78 (July 13, 2020)

- APPLE-1034 Joseph Guzman, “Fauci says second wave of coronavirus is ‘inevitable’”, TheHill.com (Apr. 29, 2020), available at: <https://thehill.com/changing-america/resilience/natural-disasters/495211-fauci-says-second-wave-of-coronavirus-is>
- APPLE-1035 “Tracking the coronavirus in Los Angeles County,” LATimes.com (Aug. 20, 2020), available at <https://www.latimes.com/projects/california-coronavirus-cases-tracking-outbreak/los-angeles-county/>
- APPLE-1036 Order Amending Scheduling Order, Masimo et al. v. True Wearables et al., Case 8:18-CV-02001 (July 7, 2020)
- APPLE-1037 *Masimo Corporation, et al. v. Apple Inc.*, Second Amended Complaint, Civil Action No. 8:20-cv-00048 (C.D. Cal.)
- APPLE-1038 to 1039 RESERVED
- APPLE-1040 Order Granting Stipulation to Amend the Scheduling Order, *Masimo v. Apple*, Case 8:20-cv-00048, Paper 201 (September 21, 2020)
- APPLE-1041 U.S. Patent No. 8,040,758 (“Dickinson”)
- APPLE-1042 to 1047 RESERVED
- APPLE-1048 Order Re Motion to Stay, *Masimo v. Apple*, Case 8:20-cv-00048, Paper 201 (October 13, 2020)
- APPLE-1049 Declaration of Robert Jacob Munford
- APPLE-1050 Second Declaration of Dr. Thomas W. Kenny
- APPLE-1051 Eugene Hecht, Optics (2<sup>nd</sup> Ed. 1990)
- APPLE-1052 Eugene Hecht, Optics (4th Ed. 2002)

# 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.