

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of: Ammar Al-Ali
U.S. Patent No.: 10,687,745 Attorney Docket No.: 50095-0045IP3
Issue Date: June 23, 2020
Appl. Serial No.: 16/835,772
Filing Date: March 31, 2020
Title: PHYSIOLOGICAL MONITORING DEVICES, SYSTEMS,
AND METHODS

Mail Stop Patent Board

Patent Trial and Appeal Board
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

**PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT
NO. 10,687,745 PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42**

TABLE OF CONTENTS

I.	REQUIREMENTS FOR IPR UNDER 37 C.F.R. § 42.104.....	1
A.	Standing	1
B.	Challenge and Relief Requested.....	1
II.	SUMMARY OF THE '745 PATENT	2
A.	Brief Description.....	2
B.	Summary of the Prosecution History.....	3
C.	Level of Ordinary Skill in the Art.....	4
III.	CLAIM CONSTRUCTION UNDER 37 C.F.R. §§ 42.104(b)(3)	5
IV.	THE CHALLENGED CLAIMS ARE UNPATENTABLE.....	5
A.	Ground 1A: Claims 2-3, 5-6, 8, 10-12, and 14 are obvious over Iwamiya in view of Sarantos	5
1.	Overview of Iwamiya.....	5
2.	Overview of Sarantos	6
3.	Analysis	7
B.	Ground 1B: Claims 4, 17, 19, and 21-26 are obvious over Iwamiya and Sarantos in view of Venkatraman.....	23
1.	Overview of Venkatraman	23
2.	Analysis	24
C.	Ground 2A: Claims 2, 5-6, 8, 10-11, 13-14, 17, and 19 are obvious over Sarantos in view of Shie	38
1.	Overview of Shie.....	38
2.	Analysis	39
D.	Ground 2B: Claims 3-4, 17, 19, and 21-26 are obvious over Sarantos and Shie in view of Venkatraman.....	56
1.	Analysis	56
V.	Ground 2C: Claim 12 is obvious over Sarantos in view of Shie and Savant.....	69
A.	Overview of Savant	69
B.	Analysis.....	70
VI.	PTAB DISCRETION SHOULD NOT PRECLUDE INSTITUTION.....	72
A.	314(a) – <i>Fintiv</i>	72
B.	314(a) – <i>General Plastic</i>	74
C.	325(d) – <i>Advanced Bionics</i>	76
VII.	MANDATORY NOTICES UNDER 37 C.F.R. §42.8.....	78
A.	Real Parties-In-Interest Under 37 C.F.R. §42.8(b)(1)	78
B.	Related Matters Under 37 C.F.R. §42.8(b)(2)	78

C. Lead And Back-Up Counsel Under 37 C.F.R. §42.8(b)(3).....	80
D. Service Information	80
VIII. PAYMENT OF FEES – 37 C.F.R. §42.103.....	80
IX. CONCLUSION.....	80

EXHIBITS

APPLE-1001	U.S. Pat. No. 10,687,745 to Al-Ali (“the ’745 patent”)
APPLE-1002	Prosecution History of the ’745 patent (Serial No. 16/835,772)
APPLE-1003	Declaration of Dr. Brian Anthony
APPLE-1004	U.S. Pat. No. 8,670,819 (“Iwamiya”)
APPLE-1005	U.S. Pat. No. 9,392,946 (“Sarantos”)
APPLE-1006	U.S. Pub. No. 2014/0275854 (“Venkatraman”)
APPLE-1007	U.S. Pat. No. 6,483,976 (“Shie”)
APPLE-1008	U.S. Pat. No. 6,801,799 (“Mendelson-799”)
APPLE-1009	U.S. Pub. No. 2015/0018647 (“Mandel”)
APPLE-1010	U.S. Pub. No. 2009/0275810 (“Ayers”)
APPLE-1011	Int’l Pub. No. WO 2011/051888 (“Ackermans”)
APPLE-1012	U.S. Pat. No. 6,158,245 (“Savant”)
APPLE-1013	Design of Pulse Oximeters, J.G. Webster; Institution of Physics Publishing, 1997 (“Webster”)
APPLE-1014	U.S. Pub. No. 2009/0054112 (“Cybart”)
APPLE-1015	U.S. Pat. No. 5,893,364 (“Haar”)
APPLE-1016	U.S. Pat. No. 5,952,084 (“Anderson”)

- APPLE-1017 U.S. Pat. No. 10,470,695 (the “695 patent”)
- APPLE-1018 *Apple v. Masimo*, Case No. IPR2020-01722, Paper 29 (Final Written Decision) (PTAB May 5, 2022) (the “695 FWD”)
- APPLE-1019 U.S. Pub. No. 2009/0097129 (“Naito”)
- APPLE-1020 U.S. Pub. No. 2006/0128869 (“Taima”)
- APPLE-1021 *Polymers and Plastic Resins Information*, Engineering360, printed from https://www.globalspec.com/learnmore/materials_chemicals_adhesives/plastics_elastomers_polymers/plastics_polymers on August 15, 2022
- APPLE-1022 *Methods and Approaches of Futures Studies*, printed from <http://crab.rutgers.edu/~goertzel/futuristmethods.html> on August 15, 2022
- APPLE-1023 – APPLE-1030 RESERVED
- APPLE-1031 *Masimo Corporation, et al. v. Apple Inc.*, Redacted Complaint, ITC Inv. No. 337-TA-1276
- APPLE-1032 *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation*, issued June 21, 2022 (“Interim Guidance”)

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.