UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC. and FITBIT, INC.
Petitioners

v.

VALENCELL, INC.
Patent Owner

Case IPR2017-00317[1]
Patent 8,989,830

PETITIONER APPLE INC.'S
REPLY TO PATENT OWNER RESPONSE

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[1] IPR2017-01553 has been joined to this current proceeding.

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1002	U.S. Patent No. 8,989,830 File History
1003	Declaration of Dr. Brian W. Anthony in Support of Petition for *Inter Partes* Review of U.S. Patent No. 8,989,830
1004	*Curriculum Vitae* of Dr. Brian W. Anthony
1005	Asada, H. *et al.* "Mobile Monitoring with Wearable Photoplethysmographic Biosensors," IEEE Engineering in Medicine and Biology Magazine, May/June 2003; pp. 28-40
1006	U.S. Patent No. 5,226,417 to Swedlow *et al.* titled "Apparatus for the Detection of Motion Transients," issued July 13, 1993
1007	U.S. Patent No. 4,830,014 to Goodman *et al.* titled "Sensor Having Cutaneous Conformance," issued May 16, 1989
1008	U.S. Patent No. 6,745,061 to Hicks *et al.* titled "Disposable Oximetry Sensor," issued June 1, 2004
1009	U.S. Patent No. 7,190,986 to Hannula *et al.* titled "Non-Adhesive Oximeter Sensor for Sensitive Skin," issued March 13, 2007
1010	U.S. Patent No. 5,797,841 to Delonzor *et al.* titled "Shunt Barrier in Pulse Oximeter Sensor," issued August 25, 1998
1011	U.S. Patent Application Publication No. 2007/0123763 to Al-Ali *et al.* titled "Optical Sensor Including Disposable and Reusable Elements," published May 31, 2007
1012	Excerpt from Merriam Webster's Collegiate Dictionary, Eleventh Edition, 2008; p. 828
1013	Mendelson, Y. *et al.*, "Skin Reflectance Pulse Oximetry: In Vivo Measurements from the Forearm and Calf," Journal of Clinical Monitoring, Vol. 7, No. 1, January 1991; pp. 7-12
1014	Konig, V. *et al.*, "Reflectance Pulse Oximetry – Principles and Obstetric Application in the Zurich System," Journal of Clinical Monitoring and Computing, Vol. 14, No. 6, August 1998; pp. 403-412

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1015	Mendelson, Y. *et al*. "A Wearable Reflectance Pulse Oximeter for Remote Physiological Monitoring," Proceedings of the 28th IEEE EMBS Annual International Conference, New York City, New York, August 30-September 3, 2006; pp. 912-915
1016	U.S. Patent No. 6,608,562 to Kimura *et al*. titled "Vital Signal Detecting Apparatus," issued August 19, 2003
1017	Tremper, K. *et al*., "Pulse Oximetry," Medical Intelligence Article, Anesthesiology, Vol. 70, No. 1, January 1989; pp. 98-108
1018	Declaration of Gerard P. Grenier in support of Asada, H. *et al*. "Mobile Monitoring with Wearable Photoplethysmographic Biosensors," IEEE Engineering in Medicine and Biology Magazine, May/June 2003; pp. 28-40 (APL1005)
1019	*Intentionally Left Blank*
1020	*Intentionally Left Blank*
1021	*Intentionally Left Blank*
1022	Transcript of teleconference among Board and Parties held on October 13, 2017, *Apple Inc. v. Valencell, Inc.*, Case Nos. IPR2017-00315, IPR2017-00317, IPR2017-00318, IPR2017-00319, and IPR2017-00321.
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1100	Transcript of the Deposition of Dr. Albert Titus, November 9, 2017, *Apple Inc. v. Valencell, Inc.*, Case No. IPR2017-00318.
1101	Transcript of the Deposition of Dr. Albert Titus, November 10, 2017, *Apple Inc. v. Valencell, Inc.*, Case No. IPR2017-00317.
1102	Declaration of Dr. Brian W. Anthony in Support of Petitioner's Reply to Patent Owner's Response
1103	Declaration of Dr. Brian W. Anthony in Support of Petitioner's Opposition to Patent Owner's Motion to Amend in *Inter Partes* Review of U.S. Patent No. 8,989,830
1104	Hyonyoung Han *et al., Development of a wearable health monitoring device with motion artifact reduced algorithm*, International Conference on Control, Automation and Systems, IEEE (2007)
1105	Declaration of Gerard P Grenier in support of Hyonyoung Han *et al., Development of a wearable health monitoring device with motion artifact reduced algorithm*, International Conference on Control, Automation and Systems, IEEE (2007) (Ex. 1106)

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1106	Lu X. *et al.*, "A statistical experimental study of the injection molding of optical lenses," Journal of Materials Processing Technology, Vol. 113, 2001; pp. 189-195
1107	Ong N.S. *et al.*, "Microlens array produced using hot embossing process," Microelectric Engineering, Vol. 60, 2002; pp. 365-379
1108	Rapaport *et al.*, "Control of Blood Flow to the Extremities at Low Ambient Temperatures," Journal of Applied Physiology, Vol. 2, 1949; pp. 61-71
1109	Daanen H.A.M., "Finger cold-induced vasodilation: a review," Springer-Verlag, European Journal of Applied Physiology, Vol. 89, 2003; pp. 411-426

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