UNITED STATES PATENT AND TRADEMARK OFFICE
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BEFORE THE PATENT TRIAL AND APPEAL BOARD
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APPLE, INC.,
Petitioner,

v.

ALIVECOR, INC.,
Patent Owner

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IPR2021-00970
U.S. Patent No. 9,572,499

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PATENT OWNER'S RESPONSE

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TABLE OF EXHIBITS

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1001	U.S. Pat. No. 9,572,499 to Gopalakrishnan ("the '499 Patent")
1002	Excerpts from the Prosecution History of the '499 Patent ("the Prosecution History")
1003	Declaration of Dr. Bernard A. Chaitman
1004	PCT Patent Publication WO2012/140559 ("Shmueli")
1005	U.S. Patent Publication 2014/0275840 ("Osorio")
1006	Li Q, Clifford GD, "Signal quality and data fusion for false alarm reduction in the intensive care unit," J Electrocardiol. 2012 Nov-Dec; 45(6):596-603 ("Li 2012")
1007	U.S. Patent Publication 2008/0004904 ("Tran")
1008	U.S. Patent Publication 2014/0107493 ("Yuen")
1009	U.S. Patent Publication 2015/0119725 ("Martin")
1010	U.S. Provisional Application No. 61/794,540 ("OP")
1011	Lee J, Reyes BA, McManus DD, Mathias O, Chon KH. Atrial fibrillation detection using a smart phone. International Journal of Bioelectromagnetism, Vol. 15, No. 1, pp. 26 - 29, 2013 ("Lee 2013")
1012	Tsipouras MG, Fotiadis DI. Automatic arrhythmia detection based on time and time-frequency analysis of heart rate variability. Comput Methods Programs Biomed. 2004 May; 74(2):95-108 ("Tsipouras 2004")
1013	Lu S, Zhao H, Ju K, Shin K, Lee M, Shelley K, Chon KH. Can photoplethysmography variability serve as an alternative approach to obtain heart rate variability information? J Clin Monit Comput. 2008 Feb; 22(1):23-9 ("Lu 2008")
1014	Selvaraj N, Jaryal A, Santhosh J, Deepak KK, Anand S. Assessment of heart rate variability derived from finger-tip photoplethysmography as compared to electrocardiography. J Med Eng Technol. 2008 Nov-Dec; 32(6):479-84 ("Selvaraj 2008")
1015	Lu G, Yang F, Taylor JA, Stein JF. A comparison of photoplethysmography and ECG recording to analyse heart rate variability in healthy subjects. J Med Eng Technol. 2009; 33(8):634-41 ("Lu 2009")
1016	Suzuki T, Kameyama K, Tamura T. Development of the irregular pulse detection method in daily life using wearable

EX. NO.	DESCRIPTION
	photoplethysmographic sensor. Annu Int Conf IEEE Eng Med Biol Soc. 2009; 2009:6080-3 ("Suzuki 2009")
1017	Reed MJ, Robertson CE, Addison PS. Heart rate variability measurements and the prediction of ventricular arrhythmias. QJM. 2005 Feb; 98(2):87-95 ("Reed 2005")
1018	Schäfer A, Vagedes J. How accurate is pulse rate variability as an estimate of heart rate variability? A review on studies comparing photoplethysmographic technology with an electrocardiogram. Int J Cardiol. 2013 Jun 5; 166(1):15-29 ("Schafer 2013")
1019	K. Douglas Wilkinson, "The Clinical Use of the Sphygmomanometer," The British Medical Journal, 1189-90 (Dec. 27, 1924) ("Wilkinson")
1020	U.S. Pat. No. 6,095,984 ("Amano")
1021	B.K. Bootsma et. al, "Analysis of R-R intervals in patients with atrial fibrillation at rest and during exercise." Circulation 1970; 41:783-794
1022	Frits L. Meijler and Fred H. M. Wittkampf, "Role of the Atrioventricular Node in Atrial Fibrillation" Atrial Fibrillation: Mechanisms and Management, 2nd ed. 1997 ("Meijler")
1023	Heart Diseases _ Definition of Heart Diseases by Merriam-Webster
1024	Acharya UR, Joseph KP, Kannathal N, Lim CM, Suri JS. Heart rate variability: a review. Med Biol Eng Comput. 2006 Dec; 44(12):1031-51 ("Acharya 2006")
1025	Saime Akdemir Akar, Sadık Kara, Fatma Latifoğlu, Vedat Bilgiç. Spectral analysis of photoplethysmographic signals: The importance of preprocessing. Biomedical Signal Processing and Control, 2013; 8(1):16-22 (Akar 2013)
1026	U.S. Provisional Application No. 61/915,113
1027	U.S. Provisional Application No. 61/953,616
1028	U.S. Provisional Application No. 61/969,019
1029	U.S. Provisional Application No. 61/970,551
1030	U.S. Provisional Application No. 62/014516
1031	U.S. Patent Publication No. 2012/0203491 ("Sun")
1032	U.S. Patent No. 9,808,206 ("Zhao")

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