

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent of: Ammar Al-Ali  
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App. Serial No.: 16/835,772  
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Title: PHYSIOLOGICAL MONITORING DEVICES, SYSTEMS,  
AND METHODS

**SUPPLEMENTAL DECLARATION OF DR. BRIAN W. ANTHONY**

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I, Brian W. Anthony, of Cambridge, MA, declare that:

## **I. INTRODUCTION**

1. I have been retained by Fish & Richardson, P.C., on behalf of Apple Inc. (“Petitioner”), as an independent expert consultant in *inter partes* review (“IPR”) proceedings IPR2022-01291 and IPR2022-01465 before the United States Patent and Trademark Office (“PTO”). I understand that this declaration will be submitted in support of Petitioner’s Replies to Patent Owner’s Response to the Petition for *inter partes* review of the ’745 Patent (U.S. Patent No. 10,687,745) in each of the proceedings. I will refer to the Patent Owner’s Response in IPR2022-01291 as “1291-POR” and the Patent Owner’s Response in IPR2022-01465 as “1465-POR.”

2. This declaration supplements, and is intended to be read in conjunction with, my declarations in support of Apple’s Petitions in IPR2022-01291 and IPR2022-01465. I will refer to my first declaration in IPR2022-01291 as “1291-Declaration” or “1291-APPLE-1003,” and my first declaration in IPR2022-01465 as “1465-Declaration” or “1465-APPLE-1003.” In my first declarations, I address many topics, including (but not limited to) my background and qualifications, the level of skill in art, an overview of the ’745 Patent, claim construction, certain legal standards explained to me by Apple’s counsel, and a

detailed analysis of the prior art against the '745 Patent's claims. The opinions and explanations expressed in my first declarations apply equally here.

3. In writing this Supplemental Declaration, I have considered the following: my own knowledge and experience, including my teaching and work experience in the above fields; and my experience of working with others involved in those fields. I have also reviewed the following materials, in addition to other materials I cite in this declaration:

- 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 (“Venkataraman”)
- 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: PCT. Pub. No. 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”)

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