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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.

Petitioner,

v.

MASIMO CORPORATION,

Patent Owner.

IPR2020-01722
Patent 10,470,695

MASIMO SUR-REPLY TO PETITIONER REPLY

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I. INTRODUCTION

In its Reply, Apple premised all of its arguments on a contextless cite to Chin and an unsupported assertion about Masimo’s experimental evidence.

First, Apple repeatedly argued that Chin is not directed only to “thin tissue” devices like nostril sensors because of “Chin’s explicit disclosure that its sensor ‘could attach to *any body part.*’” REPLY (Paper 18) at 2, 5, 10, 11, 12, 14, 15 (quoting EX1006 at 5:55-56, emphasis by Apple). But Apple offered no context for this quote. The quoted statement is a general statement about pulse oximetry and unrelated to the specific nostril sensor relied on in the Petition. No such pulse oximetry sensor exists that can attach to any body part. It is well established that sensors must be designed for the intended measurement sites. EX1021 at 87, 88, 91. Chin is no different.

Second, Apple criticized Masimo’s evidence showing that a diffuser reduces the light reaching a detector in a reflectance-based sensor. In short, Apple argued that, because the asserted references teach multiple detectors, Masimo’s evidence based on a sensor having a single detector to show the reduction in light can be summarily discarded. But Apple makes the wrong comparison. The relevant comparison is between a sensor with a diffuser and a sensor without a diffuser. If a one detector sensor proves a diffuser causes less light to reach the one detector, each additional detector will likewise receive less light. The reduction of light

received by each detector will result in an overall reduction of light received by the sensor. That is, for a sensor with a given number of detectors, the addition of a diffuser results in less light detected than that same detector without the diffuser. Thus, Masimo has shown that a POSITA would have known a reflectance-based sensor receives less light with the addition of the diffuser, regardless of the number of detectors.

As Apple supports its entire Reply on these two flawed allegations, Apple failed to demonstrate obviousness. Accordingly, the Board should affirm the patentability of Claims 6, 14, and 21 of the '695 Patent.

II. CHIN'S DIFFUSER IS NOT NECESSARY FOR THICK TISSUE

A. Chin's Sensor Addresses Issues Specific to Thin Tissue Measurement Sites

Apple in its Petition argued “[i]t would have been obvious to a POSITA to combine Chin’s diffuser with Sarantos-Mendelson-1991 physiological monitoring device to diffuse the light that is emitted from the light source emitters so that the emitted light could pass through more tissue and blood.” Pet. (Paper 2) at 61. Apple made the same argument with respect to the combination of Ackermans and Chin. *Id.* at 102-103. Masimo in its Response explained that Chin needs its diffuser because Chin’s sensor is designed for thin tissue measurement sites (e.g., ear lobe or nostril) with less tissue available to generate sufficient backscattering, meaning less light reaches the detector. POR (Paper 13) at 16-19. Masimo also explained

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