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

v.

Petitioner,

OMNI MEDSCI, INC., Patent Owner.

Patent No. 9,651,533 IPR2019-00916

DECLARATION OF BRIAN ANTHONY, PH. D. REGARDING U.S. PATENT NO. 9,651,533

Petitioner Apple Inc.

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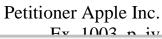
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4.	Lisogurski and Carlson Describe the Elements of Claim 13 of the '533 Patent				
	a)	Preamble			
	b)	"a wearable measurement device"			
	c)	"the light source configured to increase signal-to-noise ratio" 45			
	d)	"the wearable measurement device comprising a plurality of lenses configured to receive a portion of the output optical beam and to deliver an analysis output beam to a sample"59			
	e)	"the wearable measurement device further comprising a receiver configured to receive and process at least a portion of the analysis output beam reflected or transmitted from the sample and to generate an output signal, wherein the wearable measurement device receiver is configured to be synchronized to pulses of the light source"			
	f)	"a personal device"			
	g)	"a remote device"			
5.		sogurski and Carlson Describe the Elements of Claim 5 the '533 Patent80			
	a)	Preamble			
	b)	"a light source comprising a plurality of semiconductor sources that are light emitting diodes configured to generate an output optical beam with one or more wavelengths, wherein at least a portion of the one or more optical wavelengths is a near-infrared wavelength between 700 nanometers and 2500 nanometers"			
	c)	"the light source configured to increase signal-to-noise ratio"			
	d)	"an apparatus comprising a plurality of lenses configured to receive a portion of the output optical beam and to deliver an analysis output beam to a sample"			
	e)	"a receiver configured to receive and process at least a portion of the analysis output beam reflected or transmitted from the sample and to generate an output signal, wherein the receiver			

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		is configured to be synchronized to pulses of the light source' 83	,
		f) "a personal device"	3
		g) "a remote device configured to receive over the wireless transmission link an output status comprising the at least a portion of the processed output signal, to process the received output status to generate processed data and to store the processed data."	
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I. INTRODUCTION

A. Engagement

1. I have been retained by counsel for Apple Inc. as an expert witness in the above-captioned proceeding. I have been asked to provide an opinion regarding the patentability of certain claims in U.S. Patent No. 9,651,533 ("the '533 Patent") (Exhibit 1001). The face of the '533 patent identifies Omni MedSci, Inc. ("Omni") as the assignee. I have been asked to provide a discussion of the meaning of certain words and phrases in the claims of the '533 patent, to provide a description of state of the art of the technology described in the '533 patent, and to analyze various references that I understand are prior art to these patents.

B. Background and Qualifications

- 2. As indicated in my curriculum vitae ("CV"), Ex.1053, I am currently a Principal Research Scientist at the Massachusetts Institute of Technology ("MIT"). My CV includes additional information about my professional history and contains further details on my experience, publications, patents, and other qualifications to render an expert opinion. Below, I highlight some of my experience that is relevant to the technology of the patent at issue.
- 3. I earned a Bachelor of Science in Engineering from Carnegie Mellon
 University in 1994 and a Master's degree in Engineering from MIT in 1998. My
 thesis topic related to anisotropic wave guides and acoustic non-destructive testing.

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