UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD APPLE INC. Petitioner, v. MASIMO CORPORATION, Patent Owner. IPR2020-01714 Patent 10,631,765

DECLARATION OF CAROL PETERSON



- I, Carol Peterson, declare as follows:
- I have personal knowledge of the facts set forth herein. 1.
- I am a research librarian at the law firm of Knobbe, Martens, Olson & 2. Bear, LLP.
- 3. On 28 May 2021, I accessed the following uniform resource locator ("URL") using Microsoft Edge:

https://web.wpi.edu/Pubs/E-project/Available/E-project-042413-160152

Exhibit 2014 is a true and accurate copy of a printout of the above 4. URL on 28 May 2021. Below is a screenshot of the webpage at the above URL on 28 May 2021.

Electronic Projects Collection Worcester Polytechnic Institute

Title page for E-project-042413-160152

Project Type	MQP						
Submission date	2013-04-24						
Authors	Alexandra V Fontaine, BE Arben Koshi, BE Danielle C Morabito, BE Nicolas A Rodriguez, BE						
URN	E-project-042413-160152						
Title	Reflectance-Based Pulse Oximetry for the Chest and Wrist						
Advisor	Mendelson, Yitzhak, BE						
Availability	unrestricted						
Abstract Reflectance-based pulse oximetry is a technique used for noninvasively monitoring the oxygen saturation (SpO2) and pulse rate (PR). However, there is little supporting evidence that it can accurately collect measurements from the chest and wrist. In this project, a reflectance-based pulse oximeter was built and used to collect measurements while sitting, standing, during self-induced hypoxia, and during self-induced hyperventilation then compared to the measurements taken by a HOMEDIC Deluxe Pulse Oximeter. The prototype was able to accurately measure within an error of ± 1% and ±3% for SpO2 and PR respectively from the wrist while an error of ±1% and +4% for SpO2 and PR respectively from the chest.							
Files • Final_MQP_Report.pdf							

Browse by Author | Browse by Department | Search all available E-projects







Questions? Email <u>project-questions@wpi.edu</u> Maintained by webmaster@wpi.edu



5. Also on 28 May 2021, I accessed the document Final_MQP_Report.pdf, using a link located at the URL listed in paragraph 3 of this declaration. This link directed Microsoft Edge to the following URL:

https://web.wpi.edu/Pubs/E-project/Available/E-project-042413-160152/unrestricted/Final MQP Report.pdf

6. Exhibit 2015 is a true and accurate copy of a printout of the document Final_MQP_Report.pdf located at the URL in paragraph 5 of this declaration on 28 May 2021, and available and accessed via the link in paragraph 3 of this declaration. Below is a screenshot of a top portion of the document Final_MQP_Report.pdf located at the URL in paragraph 5 of this declaration on 28 May 2021.



REFLECTANCE-BASED PULSE OXIMETER FOR THE CHEST AND WRIST

A Major Qualifying Project Report:

Submitted to the Faculty

Of the

WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirements for the

Degree of Bachelor of Science



7. On 28 May 2021, I accessed the following uniform resource locator ("URL") using Microsoft Edge:

https://spectrum.ieee.org/view-from-the-valley/biomedical/devices/should-you-trust-apples-new-blood-oxygen-sensor

8. Exhibit 2016 is a true and accurate copy of a printout of the above URL on 28 May 2021. Below is a screenshot of a top portion the webpage at the above URL on 28 May 2021.



21 Sep 2020 | 19:00 GMT

Should You Trust Apple's New Blood Oxygen Sensor?

In the time of COVID, pulse oximeters are the new thermometers, on the shelves of many medicine cabinets. But do they belong in wristwatches?

By Tekla S. Perry

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Dated: May 28,2021	By:/Carol Peterson/	
	Carol Peterson	

