



DECLARATION OF GORDON MACPHERSON

I, Gordon MacPherson, am over twenty-one (21) years of age. I have never been convicted of a felony, and I am fully competent to make this declaration. I declare the following to be true to the best of my knowledge, information and belief:

1. I am Director Board Governance & IP Operations of The Institute of Electrical and Electronics Engineers, Incorporated (“IEEE”).
2. IEEE is a neutral third party in this dispute.
3. I am not being compensated for this declaration and IEEE is only being reimbursed for the cost of the article I am certifying.
4. Among my responsibilities as Director Board Governance & IP Operations, I act as a custodian of certain records for IEEE.
5. I make this declaration based on my personal knowledge and information contained in the business records of IEEE.
6. As part of its ordinary course of business, IEEE publishes and makes available technical articles and standards. These publications are made available for public download through the IEEE digital library, IEEE Xplore.
7. It is the regular practice of IEEE to publish articles and other writings including article abstracts and make them available to the public through IEEE Xplore. IEEE maintains copies of publications in the ordinary course of its regularly conducted activities.
8. The article below has been attached as Exhibit A to this declaration:

A.	Y. Mendelson and B.D. Ochs, “Noninvasive pulse oximetry utilizing skin reflectance photoplethysmography”, IEEE Transactions on Biomedical Engineering, Vol. 35, Issue 10, October 1988.
----	---

9. I obtained a copy of Exhibit A through IEEE Xplore, where it is maintained in the ordinary course of IEEE’s business. Exhibit A is a true and correct copy of the Exhibit, as it existed on or about April 30, 2021.
10. The article and abstract from IEEE Xplore show the date of publication. IEEE Xplore populates this information using the metadata associated with the publication.

11. Y. Mendelson and B.D. Ochs, "Noninvasive pulse oximetry utilizing skin reflectance photoplethysmography" was published in IEEE Transactions on Biomedical Engineering, Vol. 35, Issue: 10. IEEE Transactions on Biomedical Engineering, Vol. 35, Issue: 10 was published in October 1988. Copies of this publication was made available no later than the last day of the publication month. The article is currently available for public download from the IEEE digital library, IEEE Xplore.

12. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001.

I declare under penalty of perjury that the foregoing statements are true and correct.

Executed on: 5/3/2021

DocuSigned by:
Gordon Macpherson
E768DB210F4E4EF...

DocuSign Envelope ID: 3595DB4B-1765-4589-8185-7AD82F0E2BC1

EXHIBIT A



Institutional Sign In

All



ADVANCED SEARCH

Journals & Magazines > IEEE Transactions on Biomedic... > Volume: 35 Issue: 10

Back to Results

Noninvasive pulse oximetry utilizing skin reflectance photoplethysmography

Publisher: IEEE

Cite This



<< Results

Y. Mendelson ; B.D. Ochs All Authors

105 Paper Citations

38 Patent Citations

2478 Full Text Views



Export to

Collabratec

Alerts

Manage Content Alerts

Add to Citation Alerts

More Like This

Effect of Pressure on Skin-Electrode Impedance in Wearable Biomedical Measurement Devices IEEE Transactions on Instrumentation and Measurement Published: 2018

Developing a skin conductance device for early Autism Spectrum Disorder diagnosis 2016 3rd Middle East Conference on Biomedical Engineering (MECBME) Published: 2016

Show More

Abstract

Authors

References

Citations

Keywords

Metrics

More Like This

Download PDF

Abstract:The major concern in developing a sensor for reflectance pulse oximetry is the ability to measure large and stable photoplethysmograms from light which is backscattered f... **View more**

Metadata

Abstract:

The major concern in developing a sensor for reflectance pulse oximetry is the ability to measure large and stable photoplethysmograms from light which is backscattered from the skin. Utilizing a prototype optical reflectance sensor, locally heating the skin is shown to increase the pulsatile component of the reflected photoplethysmograms. Additional improvements to signal-to-noise ratio were achieved by increasing the active area of the photodetector and optimizing the separation distance between the light source and photodetector. The results from a series of in vivo studies to evaluate a prototype skin-reflectance pulse oximeter in humans are presented.< >

Published in: IEEE Transactions on Biomedical Engineering (Volume: 35 , Issue: 10, Oct. 1988)

Page(s): 798 - 805

INSPEC Accession Number: 3300017

ISSN Information:

Publisher: IEEE

PubMed ID: 3192229

Y. Mendelson

Biomedical Engineering Program, Worcester Polytechnic Institute, Worcester, MA, USA

B.D. Ochs

Biomedical Engineering Program, Worcester Polytechnic Institute, Worcester, MA, USA

Authors

Y. Mendelson

Biomedical Engineering Program, Worcester Polytechnic Institute, Worcester, MA, USA

B.D. Ochs

Biomedical Engineering Program, Worcester Polytechnic Institute, Worcester, MA, USA

References

Citations

Keywords

Metrics

IEEE Personal Account

CHANGE USERNAME/PASSWORD

Purchase Details

PAYMENT OPTIONS

VIEW PURCHASED DOCUMENTS

Profile Information

COMMUNICATIONS PREFERENCES

PROFESSION AND EDUCATION

TECHNICAL INTERESTS

Need Help?

US & CANADA: +1 800 678 4333

WORLDWIDE: +1 732 981 0060

CONTACT & SUPPORT

Follow



About IEEE Xplore | Contact Us | Help | Accessibility | Terms of Use | Nondiscrimination Policy | Sitemap | Privacy & Opting Out of Cookies

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2021 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.

IEEE Account

» Change Username/Password

» Update Address

Purchase Details

» Payment Options

» Order History

» View Purchased Documents

Profile Information

» Communications Preferences

» Profession and Education

» Technical Interests

Need Help?

» US & Canada: +1 800 678 4333

» Worldwide: +1 732 981 0060

» Contact & Support

About IEEE Xplore | Contact Us | Help | Accessibility | Terms of Use | Nondiscrimination Policy | Sitemap | Privacy & Opting Out of Cookies

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.

© Copyright 2021 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.



Find authenticated court documents without watermarks at docketalarm.com.

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.