



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 C. Pujary, “Measurement site and photodetector size considerations in optimizing power consumption of a wearable reflectance pulse oximeter”, Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, September 17 – 21, 2003.
----	--

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 shows the date of publication. IEEE Xplore populates this information using the metadata associated with the publication.
11. Y. Mendelson and C. Pujary, “Measurement site and photodetector size considerations in optimizing power consumption of a wearable reflectance pulse oximeter” was published in the Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. The 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society was held from September 17 – 21, 2003. Copies of the conference proceedings were made available no later than the last day of the conference. 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

Conferences > Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society

Back to Results

Measurement site and photodetector size considerations in optimizing power consumption of a wearable reflectance pulse oximeter

Publisher: IEEE

Cite This



<< Results

Y. Mendelson ; C. Pujary All Authors

31 Paper Citations

103 Patent Citations

1327 Full Text Views



Export to Collabratec

Alerts

Manage Content Alerts

Add to Citation Alerts

More Like This

An optical micro-instrumentation system for measurement of fluorescent proteins in whole-cell biosensors
2006 Bio Micro and Nanosystems Conference
Published: 2006

Surface Modification for Protein and DNA Immobilization onto GMR Biosensor
IEEE Transactions on Magnetics
Published: 2013

Show More

Abstract

Document Sections

- 1. Introduction
- II. METHODOLOGY
- III. RESULTS
- IV. Discussion
- V. Conclusion

Download PDF

Abstract:Site selection and power consumption play a crucial role in optimizing the design of a wearable pulse oximeter for long-term telemedicine application. In this study we in... [View more](#)

Metadata

Abstract: Site selection and power consumption play a crucial role in optimizing the design of a wearable pulse oximeter for long-term telemedicine application. In this study we investigated the potential power saving in the design of a reflectance pulse oximeter taking into consideration measurement site and sensor configuration. In-vivo experiments suggest that battery longevity could be extended considerably by employing a wide annularly shaped photodetector ring configuration and performing SpO₂ measurements from the forehead region.

Published in: Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE Cat. No.03CH37439)

Date of Conference: 17-21 Sept. 2003 INSPEC Accession Number: 7054280

Authors

Figures

References

Citations

Keywords

Print ISBN:0-7803-7789-3

Publisher: IEEE

Print ISSN: 1094-687X

Conference Location: Cancun, Mexico

Contents

1. Introduction

Noninvasive pulse oximetry is a widely accepted method for monitoring arterial hemoglobin oxygen saturation (SpO₂). Oxygen saturation is an important physiological variable since insufficient oxygen supply to vital organs can quickly lead to irreversible brain damage or result in death.

Sign in to Continue Reading

Authors



Figures



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.

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.