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A.	G.S. Gupta, et al. "Design of a Low-cost Physiological Parameter Measurement and Monitoring Device" IEEE Instrumentation and Measurement Technology Conference Proceedings, May 1 – 3, 2007.
B.	L. Wang et al., "Multichannel Reflective PPG Earpiece Sensor With Passive Motion Cancellation" IEEE Transactions on Biomedical Circuits and Systems, Vol. 1, Issue 4, December 2007.
C.	H. Han, Y. Lee, and J. Kim, "Development of a wearable health monitoring device with motion artifact reduced algorithm (ICCAS 2007)" International Conference on Control, Automation and Systems, 2007, October 17 – 20, 2007.

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11. G.S. Gupta, et al. "Design of a Low-cost Physiological Parameter Measurement and Monitoring Device" was published as part of the IEEE Instrumentation and Measurement Technology Conference Proceedings. The IEEE Instrumentation and Measurement Technology Conference was held from May 1 – 3, 2007. Attendees of the conference were provided copies of the publication 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. L. Wang et al., "Multichannel Reflective PPG Earpiece Sensor With Passive Motion Cancellation" IEEE Transactions on Biomedical Circuits and Systems, Vol. 1, Issue 4. IEEE Transactions on Biomedical Circuits and Systems, Vol. 1, Issue 4 was published in December 2007. Copies of this publication were made available no later than the last day of the stated publication month. The article is currently available for public download from the IEEE digital library, IEEE Xplore.

13. H. Han, Y. Lee, and J. Kim, "Development of a wearable health monitoring device with motion artifact reduced algorithm (ICCAS 2007)" was published as part of the International Conference on Control, Automation and Systems, 2007. The International Conference on Control, Automation and Systems, 2007 was held from October 17 – 20, 2007.Attendees of the conference were provided copies of the publication no later than the last day of the conference. The article is currently available for public download from the IEEE digital library, IEEE Xplore.

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

Executed on: 25-Oct. 2016

EXHIBIT A

Design of a Low-cost Physiological Parameter Measurement and Monitoring Device

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Author(s)

G. Sen Gupta ; S.C. Mukhopadhyay ; B.S. Devlin ; S. Demidenko

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Abstract:
In this paper we present the design of a low-cost system that can be used to monitor physiological parameters, such as temperature and heart rate, of a human subject. The system consists of an electronic device which is worn on the wrist and finger, by an elderly or at-risk person. Using several sensors to measure different vital signs, the person is wirelessly monitored within his own home. An impact sensor has been used to detect falls. The device detects if a person is medically distressed and sends an alarm to a receiver unit that is connected to a computer. This sets off an alarm, allowing help to be provided to the patient. The device is battery powered for use indoors. The device can be easily adapted to monitor athletes and infants. The low cost of the device will help to lower the cost of home monitoring of patients recovering from illness. A prototype of the device has been fabricated and extensively tested with very good results.

Published in: Instrumentation and Measurement Technology Conference Proceedings, 2007. IMTC 2007. IEEE

Date of Conference: 1-3 May 2007

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I. Introduction
Many elderly people dread the idea of being forced to live with their adult children, or in a rest home or in other sheltered living arrangement. They want to live independently and keep control of their own lives. Yet at the same time they know there is a high risk of injury or even death because of a fall or stroke. With the population aging in most developing countries, there will be more and more elderly people living alone in future. Such people need to be monitored continuously and provided with immediate medical help and attention when required.

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