

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION

Petitioner,

v.

SMART WEARABLE TECHNOLOGIES, INC.,

Patent Owner.

Patent No. 6,997,882 B1

Issued: February 14, 2006

Filed: December 21, 2002

Inventors: B. Eugene Parker, Brendan M. Fabeny, Edward C. Larson, Jeffrey F.
Monaco

Title: 6-DOF SUBJECT-MONITORING DEVICE AND METHOD

Inter Partes Review No. IPR 2017-01325

**DECLARATION OF THOMAS BLACKADAR REGARDING
U.S. PATENT NO. 6,997,882**

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I. INTRODUCTION

A. Engagement

1. I have been retained by counsel for Petitioner as an expert witness in the above-captioned proceeding. I have been asked to provide my opinion about the state of the art of the technology described in U.S. Patent No. 6,997,882 (“the 882 Patent”) (Ex. 1001) and on the patentability of the claims of this patent, particularly in view of U.S. Patent No. 6,305,221 to Hutchings (“Hutchings”) (Ex. 1005) and U.S. Patent No. No. 6,605,038 to Teller et al. (“Teller”) (Ex. 1006).

B. Background and Qualifications

2. I, Thomas Blackadar, make this declaration. All statements herein made of my own knowledge are true, and all statements herein made based on information and belief are believed to be true. I am over 21 and otherwise competent to make this declaration. Although I am being compensated for my time in preparing this declaration, the opinions herein are my own.

3. Exhibit 1004 to this declaration is my *curriculum vitae*. I earned a Bachelor of Science degree in Biomedical and Electrical Engineering from the University of New Hampshire in 1981. Since then, I have devoted my career to the field of communications, wearable devices and sensor systems.

4. Further, as shown in my *curriculum vitae*, I have significant

professional and academic experience in the field of wearable devices and sensor systems. I have been working with sensor systems for collecting and analyzing data relating to an individual's physiological state for many years. In particular, I have worked and otherwise interacted with professionals and students of various experience and expertise levels in the wearable devices field. But, throughout, a primary focus has related to developing, identifying, demonstrating, testing, and consulting on wearable devices and sensor systems embodied in complex hardware and software products. For example, I have been involved in the development of technologies related to sensor systems for collecting and analyzing data relating to an individual's physiological state. I have provided consulting services for wearable computing devices for small, medium, and large companies. These technologies include near real-time data delivery for vital signs monitors, wearable accurate speed distance watch and sensors, real-time vital signs monitoring for broadcast TV, low-power accelerometers, lower-power electronic systems, personal area wireless networks, and Warfighter Physiological Status Monitors for determining human stress levels. I have also provided to customers advanced electrocardiogram ("ECG") monitors, sensor data-fusion solutions, and advanced low-power networking topologies designs, and design review services.

5. I am currently the owner of FitSense Technology LLC. FitSense was

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