UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES FATEINT AND TRADEWARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
MICROSOFT CORPORATION
Petitioner,
$\mathbf{v}.$
SMART WEARABLE TECHNOLOGIES, INC.,
Patent Owner.
Patent No. 6,997,882 B1
Issued: February 14, 2006
Filed: December 21, 2002
ventors: 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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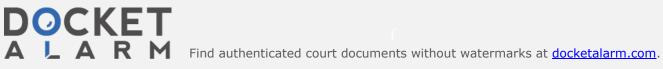
TABLE OF CONTENTS

I.	INTRODUCTION1					
	A.	Engagement1				
	B.	Background and Qualifications				
	C.	Compensation6				
	D.	Information Considered6				
II.	LEG	LEGAL STANDARDS FOR PATENTABILITY				
	A.	A. Obviousness8				
III.	The	The 882 Patent				
	A.	Effective Filing Date of the 882 Patent14				
	B.	Overview of the 882 Patent	15			
		1. Six Degrees of Freedom and 6-DOF Data	16			
		2. Physiological Data and Information	22			
		3. Combining and Synchronizing 6-DOF Data and Physiol	ogical			
		Information	23			
		4. Conclusion	25			
	C.	The Prosecution History of the 882 Patent				
	D.	Claim 8 of the 882 Patent	29			
	E.	Construction of Terms Used in the 434 Patent Claims	30			
		1. "Synchronizing/Synchronized"	31			
		2. "Reference-Frame"	35			
		3. "Anatomical Reference-Frame" and "Inertial Reference	?-			
		Frame"	37			
IV.	OVERVIEW OF THE PRIOR ART					
	A.	Level of Ordinary Skill in the Art	39			



	A.	U.S.	Patent No. 6,305,221 to ("Hutchings") (Ex. 1005)	40		
		1.	Overview	40		
		2.	The Measuring System and Acquiring 6 Degrees of Freedo	om		
			Information	42		
		3.	Displaying Results	53		
	B.	U.S.	Patent No. 6,605,038 to Teller et al. ("Teller") (Ex. 1006)	54		
		1.	Overview	54		
		2.	The Sensor System	57		
		3.	The Remote Central Monitoring Unit	66		
V.	COMPARISON OF THE PRIOR ART TO CLAIM 8 OF THE 882					
	PAT	PATENT				
	A.	chings, in combination with Teller, Renders Claims 8				
		Unp	atentable	68		
		1.	Preamble	68		
		2.	Step (a)	69		
		3.	Step (b)	72		
		4.	Step (c)	75		
		5.	Steps (d) and (e)	80		
		6.	Step (f)	89		
		7.	Step (g)	97		

Appendix A: Exhibits Referenced



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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