UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN NATIONAL MANUFACTURING INC., Petitioner,

v.

SLEEP NUMBER CORPORATION f/k/a SELECT COMFORT CORPORATION, Patent Owner.

> Case No. IPR2019-00514 Patent No. 5,904,172

DECLARATION OF DR. WILLIAM C. MESSNER IN SUPPORT OF PATENT OWNER'S RESPONSE

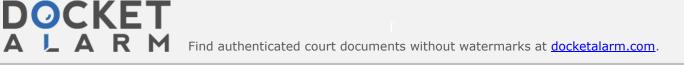


TABLE OF CONTENTS

I.	BACKGROUND 1			
II.	QUALIFICATIONS			
III.	RELEVANT FIELD OF THE INVENTION OF THE '172 PATENT 5			
IV.	MATERIALS REVIEWED			
V.	THE UNDERSTANDINGS APPLIED TO MY ANALYSIS			
VI.	BRIEF SUMMARY OF THE '172 PATENT AND PRIMARY ART 13			
	A.	Back	ground	
	B.	The '	172 Patent 15	
	C.	Sum	mary of the Primary Prior Art19	
		1.	Vrzalik (Ex. 1012)	
		2.	Shafer (Ex. 1007)	
VII.	. CLAIM CONSTRUCTION			
	A. Definition of a POSITA		nition of a POSITA	
	B. Plain and Customary Meaning		and Customary Meaning	
		1.	An enclosure defining a substantially fluidly sealed air chamber	
		2.	Enclosure being formed of an enclosure portion and a rear cover portion" with "a flexible seal between" them "to effect a substantially fluid tight seal therebetween."	
		3.	A plurality of guides and stops being disposed within the enclosure for correctly positioning components within the enclosure. 34	
		4.	Pressure Monitor Means ("PMM")	
VIII.	OPIN	JIONS	REGARDING SHAFER (EX. 1007) ANTICIPATION	

	A.	"Substantially fluidly sealed air chamber."		
	B.	PMM		
	C.	"Guides and Stops" 42		
IX.	OPINIONS REGARDING VRZALIK			
	A.	"Guides and Stops" 44		
	B.	"Enclosure Portion and a Rear Cover Portion" with a "Flexible Seal."		
X.	PETITIONER'S PROPOSED OBVIOUSNESS COMBINATIONS			
	A.	The Combination of Shafer (Ex. 1007) and Grant (Ex. 1008)		
	B.	The Combination of Shafer (Ex. 1007) and Kashiwamura (Ex. 1009)		
	C.	The Combination of Shafer, Grant, and Kashiwamura		
	D.	The Combination of Shafer and Dye (Ex. 1010)		
	E.	The Combination of Shafer, Grant, and Dye		
	F.	The Combination of Shafer and Cammack (Ex. 1011)		
	G.	The Combination of Shafer, Dye, and Cammack		
	H.	The Combination of Shafer, Kashiwamura, and Cammack76		
	I.	The Combination of Vrzalik and Shafer77		
	J.	The Combination of Shafer and Ramacier (Ex. 1014)		
XI.	SEC	SECONDARY CONSIDERATIONS		

I. BACKGROUND

I, William C. Messner, make the present Declaration in support of the Patent Owner's Response rebutting the Petition for *Inter Partes* Review (IPR) of U.S. Patent 5,904,172 ("the '172 Patent") (Ex. 1001). To that end, I hereby declare as follows:

1. I am over the age of 21 years and am fully competent to make this Declaration. I make the following statements based on personal knowledge and, if called to testify to them, could and would do so. I have been retained on behalf of Sleep Number Corporation to provide my expert opinion in a declaration that will be used in its Patent Owner's Response to the *inter partes* review of the '172 Patent. Specifically, I have been asked to analyze and opine regarding: (1) the prior art references and arguments presented by Petitioner, (2) the opinions of Dr. Giachetti presented in the Giachetti Report (Ex. 1005), (3) the transcript of Dr. Giachetti's deposition on October 7-8, 2019, and (4) what a person of ordinary skill in the art ("POSITA") would know and understand from the prior art references and the field.

2. I am being compensated at a rate of \$575/hr. My fee is not contingent on the outcome of this or any matter or on any of my opinions. I have no financial interest in Sleep Number Corporation or the '172 Patent.

3. This declaration briefly sets forth my background and qualifications to provide my expert opinion, describes the technology at issue and background of the

art, identifies the materials I reviewed to prepare this declaration, and sets forth my understanding of the patent claims at issue and my analysis and opinions regarding the application to the patent claims to the prior art provided to me. I reserve the right to supplement my opinions in the future, to clarify responses where appropriate, and to take into account new information as it becomes available to me.

II. QUALIFICATIONS

4. My qualifications as an expert in the field of mechanical and electrical engineering are set forth in the paragraphs below and in my *curriculum vitae*, attached as Appendix A.

5. I received a B.S. in mathematics from Massachusetts Institute of Technology ("MIT") in Cambridge, MA, in 1985. I received an M.S. and Ph.D. in mechanical engineering at the University of California, Berkeley in Berkeley, CA, in 1989 and 1992, respectively.

6. Following my graduation from MIT, I worked as an engineer at BBN Laboratories in Newport, RI, where I developed software for analyzing data from tests of a new torpedo under development for the US Navy. After receiving my Ph.D., I joined the Department of Mechanical Engineering at Carnegie Mellon University (CMU) in 1993. At CMU I held courtesy appointments with the Department of Electrical and Computer Engineering and with the Robotics Institute. There I specialized, among other things, in mechanical design for data storage

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