### UNITED STATES PATENT AND TRADEMARK OFFICE

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## BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC., Petitioner,

v.

NEO WIRELESS LLC, Patent Owner.

Case IPR2022-01539

Patent 10,965,512

EXHIBIT 2001 DECLARATION OF WILLIAM P. ALBERTH JR.



## TABLE OF CONTENTS

I.	INT	RODUCTION	3
II.	QU.	ALIFICATIONS	4
III.		GAL STANDARDS	
	A.	Priority Date Of Patent	6
	B.	Level Of Ordinary Skill In The Art.	6
	C.	Claim Construction.	
	D.	Obviousness Legal Standard	
IV.	CLA	AIMS-AT-ISSUE	11
V.		NIONS	
	A.	Petitioner's Ground 1	12
		1. Ground 1 Does Not Disclose "Cell-Specific Pilots"	13
		2. Ground 1 Does Not Disclose Or Render Obvious "Beam-	
		Forming" As Claimed	20
	B.	Petitioner's Ground 2.	26
		1. Ground 2 Does Not Disclose "Cell-Specific Pilots."	26
		2. Ground 2 Does Not Disclose That The Plurality Of First An	
		Second Claimed Subcarriers Are Both Transmitted "In At L One Of The Time Slots."	
VI.	CON	NCLUSION	41

## I. <u>INTRODUCTION</u>

- 1. My name is William P. Alberth Jr. I am an expert in mobile telecommunications and wireless technology. As further detailed below and exhibited in my attached *curriculum vitae*, I have over 25 years of experience in the design, development, implementation, and manufacturing of mobile telephones, smartphones, and other electronic equipment in addition to being an inventor on over 100 patents, including those related to telecommunications and wireless communications.
- 2. I have been retained as an expert witness to provide my independent opinion in regard to the matters at issue in *inter partes* review of U.S. Patent No. 10,965,512 ("the '512 patent") in IPR2021-01539. I have been retained by Neo Wireless LLC ("Neo"), the Patent Owner in the above proceedings. The Petitioner is Volkswagen Group of American Inc. ("VW").
- 3. For my work on this case, I am being compensated for my time at my typical consulting rate of \$200 per hour. I am also being reimbursed for expenses that I incur during the course of this work. My compensation does not depend on the substance of my opinions or the outcome of any issues in this case.
- 4. My analysis of the materials produced in this matter is ongoing and I will continue to review any new material as it is provided. This declaration



represents only those opinions I have formed to date. I reserve the right to amend or supplement my opinions based on additional documents or evidence I am presented, including without limitation any arguments or expert declarations advanced by VW in this case.

## II. **QUALIFICATIONS**

- 5. I am qualified to be an expert witness in this matter as I possess the requisite knowledge, skill, experience, training and education relating to the subject matter covered by the asserted patents.
- 6. In summary, I have over 25 years of experience in the design, development, implementation, and manufacturing of mobile telephones, smartphones, and other electronic equipment. The majority of my career was spent at Motorola where my final role was serving as the Chief Technology Officer for Motorola Mobile Devices. I held that position from 2007 until August 2012, and in that role, I led the development of differentiating technology that was integrated into Motorola's commercial mobile telephone products.
- 7. During the early stages of my career with Motorola (between 1987 and 2006, covering the Priority Dates of the '941 patent) I was employed as an engineer, working on developing cutting-edge chipsets to enable cellular devices, and in the development of many products that changed the way people



communicated, including the development of the Motorola MicroTAC, StarTAC and RAZR mobile telephones. I worked on or directed work on evaluating transmitter technologies and architectures to mitigate the effects of PAPR (Peak to Average Power Ratio) on the current drain of the devices. Some of the techniques evaluated include for example: pre-distortion; envelope following; EER (Envelope Elimination and Restoration); and Adaptive biasing.

- 8. My educational background includes a B.S. in Electrical Engineering from the University of Illinois Urbana-Champaign (1985), and a M.S. in Electrical Engineering from Illinois Institute of Technology (1992).
- I am inventor or co-inventor on over 100 patents issued or pending, including patents related to my work on transmitter architectures involved for wireless communications.
- 10. In forming my opinions here, I am relying on my education and experience, including my over 25 years of experience in a variety of technologies and industries related to various wireless communications systems.
- 11. Additional information concerning my background, qualifications, publications, conferences, honors, and awards are described in my Curriculum Vitae, a copy of which is attached with this Report as Exhibit 2002.



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