## UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

DELL INC.,
ZTE (USA) INC.,
and
ZTE CORPORATION,
Petitioners,

v.

3G LICENSING S.A.,

Patent Owner.

Case No. IPR2021-01157

U.S. Patent No. 7,274,933

DECLARATION OF DR. APOSTOLOS K. KAKAES IN SUPPORT OF PETITIONER'S OPPOSITION TO PATENT OWNER'S MOTION TO AMEND UNDER 37 C.F.R. § 42.121



# **TABLE OF CONTENTS**

				Page		
I.	INTI	RODU	CTION AND QUALIFICATIONS	1		
II.	MAT	MATERIALS CONSIDERED				
III.	OVE	OVERVIEW OF CONCLUSIONS				
IV.	SUM	IMAR`	Y OF THE PROPOSED AMENDMENTS	4		
V.	ANALYSIS OF PROPOSED AMENDMENTS6					
	A.	The Proposed Substitute Claims Lack Written Description				
		1.	The "Or Neither" Element Is Not Supported in the Specification	9		
		2.	The "Only If" Element Is Not Supported in the Specification	11		
		3.	The "Test" Element	13		
	B.	The I	Proposed Substitute Claims Are Indefinite	15		
	C.	The Proposed Substitute Claims Broaden the Scope of the '933 Patent				
	D.		The Proposed Amended Claims Would Have Been Obvious Based on the Grounds Discussed in My Prior Declaration			
		1.	Elements 20[b] and 21[a] Are Obvious in Light of McElwain	22		
		2.	Elements 20[c] and 21[c] Are Obvious in Light of McElwain	24		
		3.	Elements 20[a] and 21[b] Are Obvious in Light of McElwain	25		
VI.	ADD	ITION	JAL REMARKS	28		
A DD	ENDI	ζ <b>Λ</b> •Τ]	EXT OF PROPOSED SUBSTITUTE OF AIMS	20		



# **TABLE OF APPENDICES**

Document	Description
Appendix A	Text of Proposed Substitute Claims

# **TABLE OF EXHIBITS**

Exhibit	Description
1001	U.S. Patent No. 7,274,933 ("the '933 patent")
1002	Copy of Prosecution History of the '933 patent
1004	U.S. Patent Appl. Publ. No. 2003/0022689 ("McElwain")
1005	U.S. Patent Appl. Publ. No. 2004/0204136 ("Uchida")
1006	U.S. Patent No. 7,027,813 ("Hicks")
1007	3rd Generation Partnership Project; Technical Specification Group Core Network; NAS Functions related to Mobile Station (MS) in idle mode (Release 5) (3GPP TS 23.122 V5.2.0) ("TS-23.122")
1008	3rd Generation Partnership Project; Technical Specification Group Services and System Aspects – Service aspects; Service principles (Release 5) (3GPP TS 22.101 V5.8.0) ("TS-22.101")
1009	3rd Generation Partnership Project; Technical Specification Group Terminals; Characteristics of the USIM Application (Release 5) (3GPP TS 31.102 V5.3.0) ("TS-31.102")
1010	Declaration of Craig Bishop
1011	Complaint for Patent Infringement, No. 1:19-cv-01247-LPS (D. Del. July 1, 2019)
1012	Complaint for Patent Infringement, No. 3:19-cv-01694 (N.D. Tex. July 15, 2019)
1013	Complaint for Patent Infringement, No. 1:19-cv-01140-MN (D. Del. June 20, 2019)
1014	Complaint for Patent Infringement, No. 1:19-cv-01144-MN (D. Del. June 20, 2019)
1015	Amended Complaint for Patent Infringement, No. 1:20-cv-20813 (S.D. Fl. Feb. 25, 2020)



Exhibit	Description		
1016	EIA/TIA-553 Standard (AMPS)		
1017	Excerpts from EIA/TIA/IS-54 Standard (Digital AMPS)		
1018	Excerpts from TIA/EIA/136.1 Standard		
1019	Excerpts from TIA/EIA/IS-136.2-A Standard		
1020	Excerpts from TIA/EIA/IS-95 Standard		
1021	Excerpts from T. Halonen et al., "GSM, GPRS and EDGE Performance: Evolution Towards 3G/UMTS" (2d ed. Wiley 2003)		
1022	3rd Generation Partnership Project; Technical Specification Group Terminals Specification of the Subscriber Identity Module – Mobile Equipment (SIM - ME) interface (Release 1999) (3GPP TS 11.11 V8.6.0) ("TS-11.11")		
1023	Excerpts from A. Mehrotra, "GSM System Engineering" (Artech House 1997)		
1024	U.S. Patent No. 5,950,130 ("the '130 patent")		
1025	U.S. Patent No. 5,862,471 ("the '471 patent")		
1026	U.S. Patent No. 6,195,532 ("Bamburak")		
1027	U.S. Patent Appl. Publ. No. 2001/0001875 ("Hirsch")		
1028	U.S. Patent Appl. Publ. No. 2002/0111180 ("Hogan")		
1030	3rd Generation Partnership Project; Technical Specification Group Terminals; Test Specification for 'C'-language binding to (U)SIM API (Release 6) (3GPP TS 34.131 V6.0.0) ("TS-34.131")		



I, Dr. Apostolos K. "Paul" Kakaes, hereby declare as follows:

## I. INTRODUCTION AND QUALIFICATIONS

- 1. I understand that the Patent Trial and Appeal Board ("PTAB" or "Board") has instituted an *inter partes* review ("IPR") of U.S. Patent No. 7,274,933 ("the '933 patent") (Ex. 1001) and that the Patent Owner, 3G Licensing S.A., has filed a motion to amend claims 2 and 3 of the '933 patent. I have been asked to offer opinions regarding the patentability of the proposed substitute claims 20–21.
- 2. I am not, and never have been, an employee of any of the Petitioners in this IPR. I received no compensation for this Declaration beyond my normal hourly compensation based on my time actually spent on the assignment described above, and I will not receive any added compensation based on the outcome of any IPR or other proceeding involving the '933 patent.
- 3. My qualifications and experience to provide the opinions in this Declaration were previously provided in the first declaration I prepared in support of the Petition in this IPR, and are incorporated by reference here.
- 4. My understandings of the legal principles as outlined in the first declaration that I prepared in support of the Petition in this IPR have not changed, and are incorporated by reference here.
- 5. My identification of the relevant field of art and the definition of a POSITA in that field were set forth in my first declaration, and are incorporated by



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