

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

AGIS SOFTWARE DEVELOPMENT LLC,

Plaintiff,

v.

HUAWEI DEVICE USA INC., HUAWEI  
DEVICE CO., LTD. AND HUAWEI  
DEVICE (DONGGUAN) CO., LTD.,  
HTC CORPORATION,  
LG ELECTRONICS INC.,  
APPLE INC.,  
ZTE CORPORATION, ZTE (USA), INC.,  
AND ZTE (TX), INC.,

Defendants.

**Civil Action No. 2:17-CV-513-JRG  
(Lead Case)**

**Member Cases:**

Civil Action No. 2:17-CV-514-JRG  
Civil Action No. 2:17-CV-515-JRG  
Civil Action No. 2:17-CV-516-JRG  
Civil Action No. 2:17-CV-517-JRG

**JURY TRIAL DEMANDED**

**DECLARATION OF CHRIS G. BARTONE, PH.D., P.E. IN SUPPORT OF  
DEFENDANTS HUAWEI DEVICE USA INC., HUAWEI DEVICE CO., LTD. AND  
HUAWEI DEVICE (DONGGUAN) CO., LTD., HTC CORPORATION, LG  
ELECTRONICS INC., APPLE INC., ZTE (USA), INC., AND ZTE (TX), INC.'s  
RESPONSIVE CLAIM CONSTRUCTION BRIEF**

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A. '970 PATENT ..... 9

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A. '970 PATENT ..... 14

1. “means for attaching a forced message alert software packet to a voice or text message creating a forced message alert that is transmitted by said sender PDA/cell phone to the recipient PDA/cell phone, said forced message alert software packet containing a list of possible required responses” (claim 1) ..... 15

2. [means for. . .] requiring the forced message alert software on said recipient PDA/cell phone to transmit an automatic acknowledgment to the sender PDA/cell phone as soon as said forced message alert is received by the recipient PDA/cell phone (claim 1) ..... 20

3. means for requiring a required manual response from the response list by the recipient in order to clear recipient's response list from recipient's cell phone display (claim 1) ..... 25

4. means for periodically resending said forced message alert to said recipient PDA/cell phones that have not automatically acknowledged the forced message alert (claim 1) ..... 29

B. THE “DEVICE” CLAIMS ..... 31

1. The claims do not recite structure ..... 31

2. The specification does not disclose an algorithm corresponding to each claimed function ..... 34

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1. Group ..... 61

D. '251 PATENT ..... 62

1. Receiving from a Second Device ..... 62

E. '055 PATENT ..... 62

1. SMS Messages ..... 62

I, Chris G. Bartone, declare as follows:

## I. INTRODUCTION

1. I have been retained by Defendants Apple Inc. (“Apple”); HTC Corporation (“HTC”); Huawei Device USA Inc., Huawei Device Co., Ltd., Huawei Device (Dongguan) Co., Ltd. (collectively “Huawei”), LG Electronics Inc. (“LGEKR”), and ZTE (USA), Inc. and ZTE (TX), Inc. (collectively, “ZTE”) (Apple, HTC, Huawei, , LG and ZTE are collectively referred to herein as “Defendants”) as an independent expert consultant in the above-captioned case regarding U.S. Patent Nos. 8,213,970 (the “’970 patent”), 9,408,055 (the “’055 patent”), 9,445,251 (the “’251 patent”), and 9,467,838 (the “’838 patent”), and 9,749,829 (the “’829 patent”) (collectively, “Patents-In-Suit”) based on my experience, knowledge, and education related to those patents.<sup>1</sup> For each Defendant, I understand that Plaintiff AGIS Software Development LLC (“AGIS”) has asserted the following claims:

Defendant	Asserted Patent	Currently Asserted Claims
Huawei	’970 patent	1, 3-9
LG HTC	’838 patent	1, 5, 7, 10, 11, 12, 14, 15, 18, 19, 20, 22, 25, 27, 34, 38, 40, 44, 47. 54
ZTE	’251 patent	1, 2, 4, 5, 6, 8, 10, 12, 15, 18, 19, 21, 22, 23, 24, 27, 29, 31, 32, 35
	’055 patent	1, 2, 5, 7, 17, 22, 24, 27, 28, 30, 32, 34, 36, 37, 40, 42, 43, 45, 49, 54

<sup>1</sup> I have been informed that AGIS has only asserted the ’829 patent against Apple. Accordingly, unless otherwise stated, any opinions on the construction of claim terms in the ’829 patent, and any subsequent opinions rendered with respect to those terms, are proffered on only Apple’s behalf.

Apple	'970 patent	1, 3-9
	'838 patent	5, 10, 11, 14, 15, 18, 19, 20, 38, 40, 48, 54, 57, 68, 72, 74, 84
	'251 patent	2, 4, 5, 6, 8, 10, 12, 15, 18, 21, 22, 23, 27, 29, 31, 32, 35
	'055 patent	5, 7, 17, 22, 24, 25, 27, 30, 32, 34, 36, 37, 42, 43, 54
	'829 patent	2, 8, 10, 13, 14, 18, 25, 30, 32, 34, 39, 42, 50, 59, 61, 63, 68

I have been asked to provide my conclusions regarding the construction of certain terms recited in the asserted claims.

2. I am being compensated at my hourly rate of \$790 for the time I spend on this matter. No part of my compensation is dependent on the outcome of this proceeding or otherwise has any influence on my opinions in this proceeding. I have no other interest in this proceeding.

## II. QUALIFICATIONS

3. I earned a Bachelor of Science degree in Electrical Engineering from The Pennsylvania State University in 1983 with concentration in communications and antennas. In addition, I earned a Master's of Science degree in Electrical Engineering from the Naval Postgraduate School in 1987, with a specialization in Communications Engineering. I earned a Ph.D. in Electrical Engineering from Ohio University in 1998, with an emphasis in electromagnetics, antennas, and electronic navigation systems.

4. From 1983 to 1998, prior to my full-time position at Ohio University, I worked as an electronics engineer at the Naval Air Warfare Center in Patuxent River, Maryland. In 1998, after being awarded a Ph.D. in Electrical Engineering, I joined the faculty of Ohio University as a Visiting Assistant Professor. I was promoted to Assistant Professor in 1990, to Associate Professor in 2004, and became a full processor there in 2009.

5. My teaching at Ohio University has covered undergraduate and graduate level courses in electrical engineering. At the graduate level, I teach courses in the area of communications systems, satellite navigation systems, radar systems, and microwave and antenna theory. In addition to my teachings, I have led and performed various research efforts involving communications systems and mobile navigation technologies. I also have graduate level teaching experience with the Florida Institute of Technology in the areas of communications.

6. Over the decades I have worked a wide variety of communications, navigation, and surveillance (CNS) systems with the Navy, at Ohio University, and on a consultant basis with GNSS Solutions® Ltd. While working as an electronics engineer for the Navy, I worked with various RF CNS systems and data link protocols (*e.g.*, Link 11, 4A, 16, chainsaw, etc.) and RF architectures for DOD CNS and communications electronic warfare systems. At Ohio University, I have worked with various CNS system RF architectures, messaging, and data link formats. This has included may satellite data line formats (*e.g.*, GPS-IS-200, RTCA DO-229E, etc.) and data link formats (*e.g.*, RTCA , RTCM SC-104, A real-time bi-directional DPGS data link over Internet Protocol, WiFi, Bluetooth, Network Transport of RTCM via Internet Protocol (NTRIPS), Automatic Dependence Surveillance-Broadcast (ADS-B), All-purpose structured EUROCONTROL surveillance information exchange (ASTERIX), etc.). As president of GNSS

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