UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.

Before the Honorable Robert K. Rogers, Jr.
Administrative Law Judge

In the Matter of CERTAIN WIRELESS DEVICES WITH 3G AND/OR 4G CAPABILITIES AND COMPONENTS THEREOF	Investigation No. 337-TA-868

RESPONSE OF RESPONDENTS SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., AND SAMSUNG TELECOMMUNICATIONS AMERICA, LLC TO THE COMPLAINT AND NOTICE OF INVESTIGATION

Pursuant to 19 C.F.R. § 210.13, Respondents Samsung Electronics Co., Ltd. ("SEC"), Samsung Electronics America, Inc. ("SEA"), and Samsung Telecommunications America, LLC ("STA") (collectively "Samsung" or "Respondents"), by their undersigned attorneys, hereby provide a response to the Complaint titled CERTAIN WIRELESS DEVICES WITH 3G AND/OR 4G CAPABILITIES AND COMPONENTS THEREOF filed under Section 337 of the Tariff Act of 1930 ("Section 337"), as amended, by InterDigital Communications, Inc., InterDigital Technology Corporation, IPR Licensing, Inc., and InterDigital Holdings, Inc. (collectively "InterDigital" or "Complainants") on January 2, 2013 and to the Notice of Investigation issued by the United States International Trade Commission ("the Commission") on February 5, 2013 (78 Fed. Reg. 8,191-92).

RESPONSE TO THE COMPLAINT

As an initial matter, Samsung denies that it has engaged in unfair competition or violated Section 337 of the Tariff Act of 1930, as amended, by importing, selling for importation, or selling within the United States after importation any devices that infringes any valid and

enforceable intellectual property right at issue in this Investigation. Samsung further denies that any patent claim at issue in this Investigation is valid or enforceable. Samsung reserves the right to amend or supplement its responses based on any additional facts or developments that become available or that arise after the filing of this Response.

In this light, any factual allegation admitted below is admitted only as to the specific admitted facts, and not as to any purported conclusions, characterizations, implications or speculations that might follow from the admitted facts. Except as expressly admitted below, Samsung denies each and every allegation set forth in the Complaint. On personal knowledge, Samsung responds to the numbered paragraphs of the Complaint as follows:

I. INTRODUCTION[1]

1.1 Samsung admits that Complainants have filed a Complaint with the Commission pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337. Samsung denies the remaining allegations of Paragraph 1.1 of the Complaint, and specifically denies having engaged in the unlawful importation into the United States, the sale for importation, and the sale within the United States after importation of any wireless device with 3G and/or 4G capabilities that infringes U.S. Patent No. 7,190,996 ("the '996 patent"); U.S. Patent No. 7,286,847 ("the '847 patent"); U.S. Patent No. 8,009,636 ("the '636 patent"); U.S. Patent No.7,706,830 ("the '830 patent"); U.S. Patent No. 7,947,151 ("the '151 patent"); U.S. Patent No. 7,616,970 ("the '970 patent"); or U.S. Patent No. 7,502,406 ("the '406 patent") (collectively, "the Asserted Patents").

[1] Samsung repeats the headings set forth in the Complaint in order to simplify comparison of the Complaint and this Response. In doing so, Samsung makes no admission regarding the substance of the heading or any other allegation of the Complaint. Unless otherwise stated, to the extent that a particular heading can be construed as an allegation, Samsung specifically denies all such allegations.

1.2 Samsung admits that Complainants have named the proposed respondents listed in Paragraph 1.2 of the Complaint.

1.3 Samsung admits that Exhibits 1-7 to the Complaint purport to be certified copies of the '966, '847, '636, '830, '151, '970, and '406 patents. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of Paragraph 1.3 of the Complaint, and therefore denies the same.

1.4 Samsung admits that Exhibits 8-14 to the Complaint purport to be Patent and Trademark Office certified copies of the recorded assignments for the Asserted Patents.

1.5 Samsung denies the allegations of Paragraph 1.5 of the Complaint insofar as they constitute opinion and legal argument, and, therefore, require no response. Samsung specifically denies that "an industry as required by 19 U.S.C. § 1337(a)(2) and (3) exists in the United States relating to InterDigital's exploitation of the Asserted Patents."

1.6 Samsung admits that Complainants seek certain relief. Samsung denies the remaining statements in Paragraph 1.6 of the Complaint to the extent they purport to allege the existence of any of the factual and legal predicates for the relief requested. Furthermore, Samsung specifically denies that Complainants are entitled to the relief requested.

II. COMPLAINANTS

A. InterDigital Communications, Inc.

2.1 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.1 of the Complaint, and therefore denies the same.

B. InterDigital Holdings, Inc.

2.2 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.2 of the Complaint, and therefore denies the same.

C. InterDigital Technology Corporation

2.3 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.3 of the Complaint, and therefore denies the same.

D. IPR Licensing, Inc.

2.4 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.4 of the Complaint, and therefore denies the same.

E. InterDigital's History

2.5 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.5 of the Complaint, and therefore denies the same.

2.6 Samsung admits that two principal wireless technologies referred to commercially as "3G" are (i) the Wideband CDMA ("WCDMA") technology used in the Universal Mobile Telecommunications System ("UMTS") of the Third Generation Partnership Project ("3GPP"), and (ii) the "CDMA2000" technology promulgated by the Third Generation Partnership Project 2 ("3GPP2"). Samsung further admits that "4G" wireless technology is commercially referred to 4G LTE or just LTE (Long Term Evolution). With respect to the remaining allegations of Paragraph 2.6 of the Complaint, Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations, and therefore denies the same.

2.7 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.7 of the Complaint, and therefore denies the same.

2.8 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.8 of the Complaint, and therefore denies the same.

2.9 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.9 of the Complaint, and therefore denies the same.

2.10 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 2.10 of the Complaint, and therefore denies the same.

III. PROPOSED RESPONDENTS

A. Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., and Samsung Telecommunications America, LLC

3.1 Samsung admits that SEC is a Korean corporation with its principal place of business at 416 Maetan-3dong, Yeongtong-gu, Suwon-City, Gyeonggi-do, Korea 443-742. Samsung admits that SEC designs, develops and manufacturers wireless devices. Certain of such wireless devices are capable of communicating with 3G and/or 4G wireless systems. Samsung denies that SEC imports wireless devices with 3G and/or 4G capabilities into the United States. Samsung denies that SEC sells wireless devices with 3G and/or 4G capabilities in the United States and denies the remaining allegations of Paragraph 3.1 of the Complaint.

3.2 Samsung denies that SEA is a New Jersey corporation and admits that SEA has a principal place of business at 85 Challenger Road, Ridgefield Park, NJ 07660. Samsung admits that SEA imports into the United States and distributes and/or sells in the United States wireless devices manufactured by or for SEC or its affiliates. Certain of such wireless devices are capable of communicating with 3G and/or 4G wireless systems. Samsung denies the remaining allegations of Paragraph 3.2 of the Complaint.

3.3 Samsung admits that STA is a Delaware limited liability company with its principal place of business at 1301 East Lookout Drive, Richardson, Texas 75082. Samsung admits that STA imports into the United States and distributes and/or sells in the United States wireless devices manufactured by or for SEC or its affiliates. Certain of such wireless devices are capable of communicating with 3G and/or 4G wireless systems. Samsung denies the remaining allegations of Paragraph 3.3 of the Complaint.

B. Nokia Corporation and Nokia Inc.

3.4 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.4 of the Complaint, and therefore denies the same.

3.5 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.5 of the Complaint, and therefore denies the same.

C. ZTE Corporation and ZTE (USA) Inc.

3.6 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.6 of the Complaint, and therefore denies the same.

3.7 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.7 of the Complaint, and therefore denies the same.

D. Huawei Technologies Co., Ltd., FutureWei Technologies, Inc. d/b/a Huawei Technologies (USA), and Huawei Device USA, Inc.

3.8 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.8 of the Complaint, and therefore denies the same.

3.9 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.9 of the Complaint, and therefore denies the same.

3.10 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 3.10 of the Complaint, and therefore denies the same.

IV. THE TECHNOLOGY AND PRODUCTS-AT-ISSUE

4.1 Samsung admits that the Complaint concerns certain wireless devices with 3G and/or 4G, including LTE, capabilities. Samsung denies the allegations in Paragraph 4.1 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Since neither Paragraph 4.1 nor footnote 4 to Paragraph 4.1 lists any specific Samsung product as a product-at-issue in the Complaint, Samsung is without

knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 4.1 of the Complaint, and therefore denies the same.

4.2 Samsung admits that the Complaint states that it concerns certain devices with the capabilities listed in Paragraph 4.2 of the Complaint. Samsung denies the allegations in Paragraph 4.2 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Since Paragraph 4.2 fails to list any specific Samsung product as a product-at-issue in the Complaint, Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 4.2 of the Complaint, and therefore denies the same.

4.3 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations of Paragraph 4.3 of the Complaint, and therefore denies the same.

4.4 Samsung admits that LTE and LTE-Advanced are 4G wireless technologies. Samsung denies the allegations in Paragraph 4.4 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 4.4 of the Complaint, and therefore denies the same.

4.5 Samsung admits that UMTS/WCDMA includes technologies known as HSDPA, HSUPA, and HSPA+, that CDMA2000 includes technologies known as 1xRTT and EV-DO, and that 4G technology includes LTE and LTE-Advanced. Samsung denies the allegations in Paragraph 4.5 to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 4.5 of the Complaint, and therefore denies the same.

4.6 Samsung denies the allegations in Paragraph 4.6 to the extent that they purport to allege the existence of any of the factual and legal predicates or the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 4.6 of the Complaint, and therefore denies the same.

4.7 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 4.7 of the Complaint, and therefore denies the same.

V. THE ASSERTED PATENTS AND NON-TECHNICAL DESCRIPTION OF THE INVENTIONS

5.1 Samsung admits that Complainants assert the seven patents listed in Paragraph 5.1 of the Complaint.

A. U.S. Patent No. 7,190,966

1. Identification of the Patent and Ownership by InterDigital

5.2 Samsung admits that the cover of the '966 patent titled, "Method and Apparatus for Performing an Access Procedure," indicates that it was issued on March 13, 2007. Samsung further admits that the cover of the '966 patent lists Fatih Ozluturk and Gary Lomp as co-inventors. Samsung further admits that the '966 patent indicates that it issued from Patent Application No. 11/169,490, filed June 29, 2005, and purports to claim priority to Application No. 08/670,162, filed June 27, 1996, now U.S. Patent No. 5,841,768. Samsung denies the allegations in Paragraph 5.2 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.2 of the Complaint, and therefore denies the same.

5.3 Samsung admits that the '966 patent has one independent claim and eleven dependent claims. Samsung admits that Complainants list the Asserted Claims of the '966 patent

in Paragraph 5.3 of the Complaint. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.3 of the Complaint, and therefore denies the same.

5.4 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.4 of the Complaint, and therefore denies the same.

5.5 Samsung admits that Appendices A and B to the Complaint contain what purports to be a certified copy and three copies of the prosecution history of the '966 patent. Samsung also admits that Appendices A and B to the Complaint contain what purports to be cited references identified in the prosecution history of the '966 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.5 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.6 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.6 of the Complaint, and therefore denies the same.

5.7 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.7 of the Complaint, and therefore denies the same.

5.8 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.8 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.9 Samsung admits that Exhibit 15 to the Complaint contains a table listing what purports to be foreign patents and applications related to the '966 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the

truth of the remaining allegations in Paragraph 5.9 of the Complaint, and therefore denies the same.

B. U.S. Patent No. 7,286,847

1. Identification of the Patent and Ownership by InterDigital

5.10 Samsung admits that the cover of the '847 patent, titled "Method and Apparatus for Performing an Access Procedure," indicates that it was issued on October 23, 2007. Samsung further admits that the cover of the '847 patent lists Fatih Ozluturk and Gary Lomp as co-inventors. Samsung further admits that the '847 patent indicates that it issued from Patent Application No. 11/169,425, filed June 29, 2005, and purports to claim priority to Application No. 08/670,162, filed June 27, 1996, now U.S. Patent No. 5,841,768. Samsung denies the allegations in Paragraph 5.10 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.10 of the Complaint, and therefore denies the same.

5.11 Samsung admits that the '847 patent has eleven independent claims and no dependent claims. Samsung admits that Complainants list the Asserted Claims of the '847 patent in Paragraph 5.11 of the Complaint. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.11 of the Complaint, and therefore denies the same.

5.12 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.12 of the Complaint, and therefore denies the same.

5.13 Samsung admits that Appendices C and D to the Complaint contain what purports to be a certified copy and three copies of the prosecution history of the '847 patent. Samsung

also admits that Appendices C and D to the Complaint contain what purports to be cited references identified in the prosecution history of the '847 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.13 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.14 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.14 of the Complaint, and therefore denies the same.

5.15 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.15 of the Complaint, and therefore denies the same.

5.16 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.16 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.17 Samsung admits that Exhibit 15 to the Complaint contains a table listing what purports to be foreign patents and applications related to the '847 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.17 of the Complaint, and therefore denies the same.

C. U.S. Patent No. 7,616,970

1. Identification of the Patent and Ownership by InterDigital

5.18 Samsung admits that the cover of the '970 patent, titled "Dual Mode Unit for Short Range, High Rate and Long Range, Lower Rate Data Communications," indicates that it was issued on November 10, 2009. Samsung further admits that the cover of the '970 patent lists Thomas E. Gorsuch as inventor. Samsung further admits that the '970 patent indicates that it

issued from Patent Application No. 11/326,809, filed January 6, 2006, and purports to claim priority to Application No. 09/400,136, filed September 21, 1999, now U.S. Patent No. 6,526,034. Samsung denies the allegations in Paragraph 5.18 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.18 of the Complaint, and therefore denies the same.

5.19 Samsung admits that the '970 patent has two independent claims and sixteen dependent claims. Samsung admits that Complainants list the Asserted Claims of the '970 patent in Paragraph 5.19 of the Complaint. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.19 of the Complaint, and therefore denies the same.

5.20 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.20 of the Complaint, and therefore denies the same.

5.21 Samsung admits that Appendices K and L to the Complaint contain what purports to be a certified copy and three copies of the prosecution history of the '970 patent. Samsung also admits that Appendices K and L to the Complaint contain what purports to be cited references identified in the prosecution history of the '970 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.21 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.22 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.22 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.23 Samsung admits that Exhibit 17 to the Complaint contains a table listing what purports to be foreign patents and applications related to the '970 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.23 of the Complaint, and therefore denies the same.

D. U.S. Patent No. 7,941,151

1. Identification of the Patent and Ownership by InterDigital

5.24 Samsung admits that the cover of the '151 patent, titled "Method and System for Providing Channel Assignment Information Used to Support Uplink and Downlink Channels," indicates that it was issued on May 10, 2011. Samsung further admits that the cover of the '151 patent lists Marian Rudolf, Stephen G. Dick, and Phillip J. Pietraski as co-inventors. Samsung further admits that the '151 patent purports to claim priority to Provisional Application No. 60/523,049, filed November 18, 2003. Samsung denies the allegations in Paragraph 5.24 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.24 of the Complaint, and therefore denies the same.

5.25 Samsung admits that the '151 patent has four independent claims and fifty-four dependent claims. Samsung admits that Complainants list the Asserted Claims of the '151 patent in Paragraph 5.25 of the Complaint. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.25 of the Complaint, and therefore denies the same.

5.26 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.26 of the Complaint, and therefore denies the same.

5.27 Samsung admits that Appendices I and J to the Complaint contain what Complainants purport to be a certified copy and three copies of the prosecution history of the '151 patent. Samsung also admits that Appendices I and J to the Complaint contain what Complainants purport to be cited references identified in the prosecution history of the '151 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.27 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.28 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.28 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.29 Samsung admits that Exhibit 16 to the Complaint contains a table listing what Complainants purport to be foreign patents and applications related to the '151 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.29 of the Complaint, and therefore denies the same.

E. U.S. Patent No. 7,706,830

1. Identification of the Patent and Ownership by InterDigital

5.30 Samsung admits that the cover of the '830 patent, titled "Method and Subscriber Unit for Performing an Access Procedure," indicates that it was issued on April 27, 2010. Samsung further admits that the cover of the '830 patent lists Fatih M. Ozluturk and Gary R. Lomp as co-inventors. Samsung further admits that the '830 patent indicates that it issued from

Patent Application No. 12/116,263, filed May 7, 2008, and purports to claim priority to Application No. 08/670,162, filed June 27, 1996. Samsung denies the allegations in Paragraph 5.30 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.30 of the Complaint, and therefore denies the same.

5.31 Samsung admits that the '830 patent has six independent claims and twenty-four dependent claims. Samsung admits that Complainants list the Asserted Claims of the '830 patent in Paragraph 5.31 of the Complaint. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.31 of the Complaint, and therefore denies the same.

5.32 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.32 of the Complaint, and therefore denies the same.

5.33 Samsung admits that Appendices G and H to the Complaint contain what purports to be a certified copy and three copies of the prosecution history of the '830 patent. Samsung also admits that Appendices G and H to the Complaint contain what purports to be cited references identified in the prosecution history of the '830 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.33 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.34 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.34 of the Complaint, and therefore denies the same.

5.35 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.35 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.36 Samsung admits that Exhibit 15 to the Complaint contains a table listing what purports to be foreign patents and applications related to the '830 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.36 of the Complaint, and therefore denies the same.

F. U.S. Patent No. 8,009,636

1. Identification of the Patent and Ownership by InterDigital

5.37 Samsung admits that the cover of the '636 patent, titled "Method and Apparatus for Performing an Access Procedure," indicates that it was issued on August 30, 2011. Samsung further admits that the cover of the '636 patent lists Fatih Ozluturk and Gary R. Lomp as co-inventors. Samsung further admits that the '636 patent indicates that it issued from Patent Application No. 11/169,488, filed June 29, 2005, and purports to claim priority to Application No. 08/670,162, filed June 27, 1996. Samsung denies the allegations in Paragraph 5.37 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.37 of the Complaint, and therefore denies the same.

5.38 Samsung admits that the '636 patent has six independent claims and thirty-three dependent claims. Samsung admits that Complainants list the Asserted Claims of the '636 patent in Paragraph 5.38 of the Complaint. Samsung is without knowledge or information sufficient to

form a belief as to the truth of the remaining allegations in Paragraph 5.38 of the Complaint, and therefore denies the same.

5.39 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.39 of the Complaint, and therefore denies the same.

5.40 Samsung admits that Appendices E and F to the Complaint contain what purports to be a certified copy and three copies of the prosecution history of the ‘636 patent. Samsung also admits that Appendices E and F to the Complaint contain what purports to be cited references identified in the prosecution history of the ‘636 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.40 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.41 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.41 of the Complaint, and therefore denies the same.

5.42 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.42 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.43 Samsung admits that Exhibit 15 to the Complaint contains a table listing what purports to be foreign patents and applications related to the ‘636 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.43 of the Complaint, and therefore denies the same.

F. U.S. Patent No. 7,502,406

1. Identification of the Patent and Ownership by InterDigital

5.44 Samsung admits that the cover of the '406 patent, titled "Automatic Power Control System for a Code Division Multiple Access (CDMA) Communications System," indicates that it was issued on March 10, 2009. Samsung further admits that the cover of the '406 patent lists Gary Lomp, Fatih Ozluturk, and John Kowalski as co-inventors. Samsung further admits that the '406 patent indicates that it issued from Patent Application No. 10/084,007, filed February 27, 2002, and purports to claim priority to Provisional Application No. 60/000,775, filed June 30, 1995. Samsung denies the allegations in Paragraph 5.44 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.44 of the Complaint, and therefore denies the same.

5.45 Samsung admits that the '406 patent has six independent claims and thirty-four dependent claims. Samsung admits that Complainants list the Asserted Claims of the '406 patent in Paragraph 5.45 of the Complaint. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.45 of the Complaint, and therefore denies the same.

5.46 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.46 of the Complaint, and therefore denies the same.

5.47 Samsung admits that Appendices M and N to the Complaint contain what purports to be a certified copy and three copies of the prosecution history of the '406 patent. Samsung also admits that Appendices M and N to the Complaint contain what purports to be

cited references identified in the prosecution history of the ‘406 patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.47 of the Complaint, and therefore denies the same.

2. Non-Technical Description of the Patent

5.48 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.48 of the Complaint, and therefore denies the same.

5.49 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 5.49 of the Complaint, and therefore denies the same.

3. Foreign Counterparts to the Patent

5.50 Samsung admits that Exhibit 18 to the Complaint contains a table listing what purports to be foreign patents and applications related to the ‘406 patent and its related U.S. applications. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 5.50 of the Complaint, and therefore denies the same.

VI. LICENSES

6.1 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 6.1 of the Complaint, and therefore denies the same.

VII. UNLAWFUL AND UNFAIR ACTS OF RESPONDENTS — PATENT INFRINGEMENT

7.1 Samsung admits that certain of its wireless devices are capable of communicating with UMTS/WCDMA-based telecommunication systems, CDMA2000-based telecommunication systems, LTE-based telecommunication systems, and/or IEEE 802.11-based systems. Samsung denies the allegations in Paragraph 7.1 of the Complaint to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung is

without direct knowledge or information sufficient to form a belief as to the facts alleged in Paragraph 7.1 of the Complaint regarding the accused products of respondents other than Samsung, and therefore denies the same. Samsung denies the remaining allegations of Paragraph 7.1.

A. Samsung

7.2 Samsung admits that certain of its wireless devices are capable of communicating with 3G UMTS/WCDMA-based telecommunication systems that implement Release 99, Release 4, HSDPA, HSUPA, and/or HSPA+ features. Samsung further admits that certain of its wireless devices are capable of communicating with 3G CDMA2000 telecommunications systems that implement 1xRTT and/or EV-DO features. Samsung admits that certain of its wireless devices are capable of communicating with 4G LTE telecommunications systems. Samsung denies the allegations in Paragraph 7.2 to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung specifically denies that it "manufacturers or has manufactured for it, sells for importation, imports, and/or sells after importation wireless devices with 3G and/or 4G capabilities and components thereof that infringe one or more of the Asserted Patents." Samsung denies the remaining allegations of Paragraph 7.2 of the Complaint.

7.3 Samsung admits that certain of its wireless devices are capable of communicating with UMTS/WCDMA-based telecommunication systems that implement Release 99, Release 4, HSDPA, HSUPA, and/or HSPA+ features. Samsung further admits that certain of its wireless devices are capable of communicating with 3G CDMA2000 telecommunications systems that implement 1xRTT and/or EV-DO features. Samsung admits that certain of its wireless devices are capable of communicating with LTE telecommunications systems. Samsung denies the

allegations in Paragraph 7.3 to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung specifically denies that its products infringe the Asserted Patents. Samsung denies the remaining allegations of Paragraph 7.3 of the Complaint.

7.4 Samsung admits that certain of its products are capable of communicating with IEEE 802.11-based wireless systems. Samsung denies the allegations in Paragraph 7.4 to the extent that they purport to allege the existence of any of the factual and legal predicates for the relief requested. Samsung specifically denies that its products infringe the Asserted Patents. Samsung denies the remaining allegations of Paragraph 7.4 of the Complaint.

7.5 Samsung denies that the products listed in Paragraph 7.5 of the Complaint infringe any of the Asserted Patents. Furthermore, Samsung denies that Complainants are entitled to the relief requested. Samsung denies the remaining allegations of this paragraph.

7.6 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘966 patent. Samsung denies the remaining allegations in Paragraph 7.6 of the Complaint.

7.7 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘847 patent. Samsung denies the remaining allegations in Paragraph 7.7 of the Complaint.

7.8 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘636 patent. Samsung denies the remaining allegations in Paragraph 7.8 of the Complaint.

7.9 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘830 patent. Samsung denies the remaining allegations in Paragraph 7.9 of the Complaint.

7.10 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘151 patent. Samsung denies the remaining allegations in Paragraph 7.10 of the Complaint.

7.11 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘970 patent. Samsung denies the remaining allegations in Paragraph 7.11 of the Complaint.

7.12 Samsung denies the allegations that Accused Products infringe asserted claims of the ‘406 patent. Samsung denies the remaining allegations in Paragraph 7.12 of the Complaint.

7.13 Samsung denies the allegations of Paragraph 7.13 of the Complaint.

7.14 Samsung denies the allegations of Paragraph 7.14 of the Complaint.

7.15 Samsung admits that certain of its products are capable of communicating with 3G WCDMA, 3G CDMA2000, or 4G-based telecommunication systems and, in some instances, also are capable of communicating with IEEE 802.11-based wireless systems. Samsung denies the remaining allegations of Paragraph 7.15 of the Complaint.

7.16 Samsung denies the allegations of Paragraph 7.16 of the Complaint.

7.17 Samsung admits that it had knowledge of some of the Asserted Patents at a time before the Complaint was filed. Samsung denies the remaining allegations of Paragraph 7.17 of the Complaint.

B. Nokia

7.18 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.18 of the Complaint, and therefore denies the same.

7.19 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.19 of the Complaint, and therefore denies the same.

7.20 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.20 of the Complaint, and therefore denies the same.

7.21 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.21, and therefore denies the same.

7.22 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.22 of the Complaint, and therefore denies the same.

7.23 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.23 of the Complaint, and therefore denies the same.

7.24 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.24 of the Complaint, and therefore denies the same.

7.25 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.25 of the Complaint, and therefore denies the same.

7.26 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.26 of the Complaint, and therefore denies the same.

C. ZTE

7.27 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.27 of the Complaint, and therefore denies the same.

7.28 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.28 of the Complaint, and therefore denies the same.

7.29 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.29 of the Complaint, and therefore denies the same.

7.30 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.30, and therefore denies the same.

7.31 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.31, and therefore denies the same.

7.32 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.32, and therefore denies the same.

7.33 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.33 of the Complaint, and therefore denies the same.

7.34 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.34 of the Complaint, and therefore denies the same.

7.35 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.35 of the Complaint, and therefore denies the same.

7.36 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.36 of the Complaint, and therefore denies the same.

7.37 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.37 of the Complaint, and therefore denies the same.

D. Huawei

7.38 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.38 of the Complaint, and therefore denies the same.

7.39 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.39 of the Complaint, and therefore denies the same.

7.40 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.40 of the Complaint, and therefore denies the same.

7.41 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.41, and therefore denies the same.

7.42 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.42, and therefore denies the same.

7.43 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.43, and therefore denies the same.

7.44 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.44 of the Complaint, and therefore denies the same.

7.45 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.45 of the Complaint, and therefore denies the same.

7.46 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.46 of the Complaint, and therefore denies the same.

7.47 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.46 of the Complaint, and therefore denies the same.

7.48 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 7.48 of the Complaint, and therefore denies the same.

VIII. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

A. Samsung

8.1 Samsung admits that either STA or SEA imports wireless devices into the United States. Samsung further admits that STA and SEA, among other third parties, sells wireless devices in the United States after importation. Certain of such wireless devices are capable of communicating with 3G and/or 4G wireless systems. Samsung denies the remaining allegations of Paragraph 8.1 of the Complaint.

8.2 Samsung denies that it engages in unlawful importation, sale for importation, and/or sales within the United States after importation of infringing products. Furthermore, Samsung denies that Complainants are entitled to the relief requested. Samsung denies the remaining allegations of this paragraph.

8.3 Samsung admits that what purports to be a copy of a receipt for a Samsung Tab II (10.1) wireless device, and a series of photographs of the wireless device and of a box in which

the wireless device purportedly was delivered are attached to the Complaint as Exhibit 52 Attachments A, B, C and D. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 8.3 of the Complaint, and therefore denies the same.

8.4 Samsung admits that what purports to be a copy of a receipt for a Samsung Galaxy Note wireless device, and a series of photographs of the wireless device and of a box in which the wireless device purportedly was delivered are attached to the Complaint as Exhibit 52 Attachments E and F. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 8.4 of the Complaint, and therefore denies the same.

8.5 Samsung admits that what purports to be a copy of a receipt for a Samsung Galaxy S III wireless device, and a series of photographs of the wireless device and of a box in which the wireless device purportedly was delivered are attached to the Complaint as Exhibit 52 Attachments G, H, I and J. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 8.5 of the Complaint, and therefore denies the same.

8.6 Samsung admits that what purports to be a copy of a receipt for a Samsung Galaxy Note II wireless device, and a series of photographs of the wireless device and of a box in which the wireless device purportedly was delivered are attached to the Complaint as Exhibit 52 Attachments K, L, M and N. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 8.6 of the Complaint, and therefore denies the same.

8.7 Samsung admits that what purports to be a copy of a receipt for a Samsung Stellar wireless device, and a series of photographs of the wireless device and of a box in which the wireless device purportedly was delivered are attached to the Complaint as Exhibit 52 Attachments O and P. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 8.7 of the Complaint, and therefore denies the same.

8.8 Samsung admits that what purports to be a copy of a receipt for a Samsung Galaxy Note 10.1 wireless device, and a series of photographs of the wireless device and of a box in which the wireless device purportedly was delivered are attached to the Complaint as Exhibit 52 Attachments Q and R. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 8.8 of the Complaint, and therefore denies the same.

B. Nokia

8.9 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.9 of the Complaint, and therefore denies the same.

8.10 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.10 of the Complaint, and therefore denies the same.

8.11 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.11 of the Complaint, and therefore denies the same.

8.12 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.12 of the Complaint, and therefore denies the same.

C. ZTE

8.13 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.13 of the Complaint, and therefore denies the same.

8.14 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.14 of the Complaint, and therefore denies the same.

8.15 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.15 of the Complaint, and therefore denies the same.

8.16 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.16 of the Complaint, and therefore denies the same.

8.17 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.17 of the Complaint, and therefore denies the same.

8.18 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.18 of the Complaint, and therefore denies the same.

D. Huawei

8.19 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.19 of the Complaint, and therefore denies the same.

8.20 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.20 of the Complaint, and therefore denies the same.

8.21 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.21 of the Complaint, and therefore denies the same.

8.22 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.22 of the Complaint, and therefore denies the same.

8.23 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.23 of the Complaint, and therefore denies the same.

8.24 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 8.24 of the Complaint, and therefore denies the same.

IX. HARMONIZED TARIFF SCHEDULE ITEM NUMBERS

9.1 Samsung admits that the Harmonized Tariff Schedule of the United States item numbers for the following items are as follows: for telephones for cellular or other wireless networks, HTSUS 8517.12; machines for the reception, conversion, and transmission of voice, images or other data, including modems, HTSUS 8517.62; parts for articles under heading 8517, including telephones for cellular or other wireless networks, HTSUS 8517.70; and automatic data processing machines, including laptop and desktop computers, and components thereof, HTSUS 8471.30 to 8471.80. Samsung denies any remaining allegations of Paragraph 9.1 of the Complaint.

X. THE DOMESTIC INDUSTRY

10.1 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.1 of the Complaint, and therefore denies the same.

10.2 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.2 of the Complaint, and therefore denies the same.

10.3 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.3 of the Complaint, and therefore denies the same.

10.4 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.4 of the Complaint, and therefore denies the same.

10.5 Samsung admits that the Commission's Investigation Nos. 337-TA-601 & 337-TA-613 involved certain InterDigital patents. Samsung admits that the Administrative Law Judge in Investigation No. 337-TA-601 found, on summary determination based on facts and legal precedents applicable at the time, the existence of a domestic industry based on InterDigital's licensing activities with respect to certain patents, not all of the patents here in issue. Samsung denies that there was a final determination in Investigation No. 337-TA-601 that InterDigital established the existence of a domestic industry. To the extent that Complainants seek to rely on the previous Investigations to demonstrate domestic industry in this Investigation, Samsung further denies that any determination by the Commission in Investigation Nos. 337-TA-601 & 337-TA-613 has any bearing on the current Investigation. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 10.5 of the Complaint, and therefore denies the same.

10.6 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.6 of the Complaint, and therefore denies the same.

10.7 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 10.7 of the Complaint, and therefore denies the same.

XI. RELATED LITIGATION

11.1 Samsung admits that Complainants have filed a concurrent Complaint against it in the U.S. District Court for the District of Delaware. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 11.1 of the Complaint, and therefore denies the same.

11.2 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.2 of the Complaint, and therefore denies the same.

11.3 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.3 of the Complaint, and therefore denies the same.

11.4 Samsung admits that Complainants filed a Section 337 complaint against it on March 23, 2007, which resulted in Investigation No. 337-TA-601. Samsung further admits that the '847 and '966 patents, which are asserted by Complainants here, were part of the 601 Investigation. Samsung admits that the 601 Investigation settled resulting in termination of the investigation and a license between Complainants and Samsung. Samsung admits that the license expired on December 31, 2012. Samsung further admits that on the same day InterDigital filed its Section 337 complaint in the 601 Investigation against Samsung, InterDigital initiated a parallel district court action against Samsung in the District of Delaware, asserting the same patents in the ITC investigation. Samsung admits that the InterDigital Delaware action was stayed pursuant to 28 U.S.C. § 1659. Samsung admits that InterDigital's Delaware district court action was dismissed in February 2009, following a settlement between the parties. Samsung admits that also on March 23, 2007, STA and SEC commenced a separate action in the District of Delaware alleging breach of contract. Samsung admits that the complaint by STA and SEC also sought declaratory judgment of noninfringement and invalidity with respect to nine InterDigital patents not asserted in the Complaint. Samsung admits that on November 19, 2007, InterDigital filed counterclaims asserting infringement by Samsung of two of the nine patents at issue in the STA and SEC complaint. Samsung admits that the STA and SEC Delaware district court action was dismissed with prejudice based on conduct occurring before the date of dismissal in February 2009, following the parties' settlement. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 11.4 of the Complaint, and therefore denies the same.

11.5 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.5 of the Complaint, and therefore denies the same.

11.6 Samsung admits that on April 11, 2008 Complainants moved to deconsolidate the Consolidated Proceedings. Samsung further admits that an evidentiary hearing in the Samsung-only proceeding was held in July 2008. Samsung admits that the Samsung-only proceeding settled in November 2008. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in Paragraph 11.6 of the Complaint, and therefore denies the same.

11.7 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.7 of the Complaint, and therefore denies the same.

11.8 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.8 of the Complaint, and therefore denies the same.

11.9 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.9 of the Complaint, and therefore denies the same.

11.10 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.10 of the Complaint, and therefore denies the same.

11.11 Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 11.11 of the Complaint, and therefore denies the same.

XII. RELIEF REQUESTED

12.1 Samsung denies that it infringes or will infringe any valid and enforceable claim of the patents-at-issue, that Complainants' are entitled to any of the relief requested, that the allegations contained in Paragraph 12.1 allege the existence of any factual or legal predicate for

the relief requested, and the remaining allegations of Paragraph 12.1 of the Complaint. Complainants are not entitled to any of the requested relief.

ADDITIONAL INFORMATION REQUIRED UNDER COMMISSION RULE 210.13(b)

Confidential Exhibit A to this Response contains data on the quantity and value of Samsung's products that Complainants have specifically accused of infringement. The Harmonized Tariff Schedule item numbers for wireless devices imported by SEA and STA are 8517.12.00 and 8471.30.01. SEC's capacity to manufacture the products that Complainants have specifically accused of infringement is provided in Confidential Exhibit A to this Response. The United States constitutes a substantial market for Samsung for the Accused Products.

RESPONSE TO NOTICE OF INVESTIGATION

Pursuant to Commission Rule 210.13, Samsung hereby responds to the Notice of Investigation ("Notice") issued by the U.S. International Trade Commission on January 30, 2013 and published in the Federal Register on February 5, 2013 (78 Fed. Reg. 8,191-92). Without admitting any of the specific or general allegations set forth in Complainants' Complaint as referenced in the Notice, Samsung provides the following response:

Samsung admits that Complainants filed an original Complaint with the Commission on January 2, 2013, as set forth in the Notice. Samsung admits that the Complaint generally sets forth the allegations summarized in the Notice.

Samsung further admits that Complainants have requested that an investigation be instituted and that, after the investigation, an exclusion order and a cease and desist order be issued, as set forth in the Notice.

Samsung also admits that the Commission has instituted an investigation in accordance with the terms of Paragraphs 1 through 3 of the Notice. Samsung denies that it has violated any provision of Section 337 of the Tariff Act of 1930, as amended.

Specifically, Samsung denies that it has engaged in any action that would constitute unlawful importation into the United States, sale for importation, or sale within the United States after importation, of certain wireless devices with 3G and/or 4G capabilities and components thereof. Samsung further contends that the asserted claims of the '966, '847, '636, '830, '151, '970, and '406 patents are invalid or unenforceable and cannot support any remedy for alleged infringement.

Samsung denies that Complainants are entitled to any relief in this proceeding.

By providing the following information, Samsung intends only to supply data required by 19 C.F.R. § 210.13(b). Samsung specifically denies that any of the information or data supplied below relate to or support any allegations of infringement against Samsung or any violation of 19 U.S.C. § 1337.

AFFIRMATIVE DEFENSES

1. Samsung specifically alleges and asserts the following defenses, undertaking the burden of proof as to those defenses that are deemed by law to be affirmative defenses. Samsung further states that it has not had a sufficient opportunity to collect and review information relevant to potentially available defenses against the allegations of the Complaint, and thus reserves the right to modify defenses or to raise additional defenses as discovery proceeds in this investigation.

FIRST AFFIRMATIVE DEFENSE
(Invalidity)

A. United States Patent No. 7,190,966

2. On information and belief, and subject to further discovery, the asserted claims of the '966 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

3. All asserted claims of the '966 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the '966 patent and related applications; prior art references disclosed by InterDigital during prosecution of those applications; prior art references identified in prior investigations or litigations involving the '966 patent; and/or one or more of the following prior art references, taken alone or in combination:

- Wideband Spread Spectrum Digital Technologies Standards, Ejzak et al., Telecommunications Industry Association Subcommittee TR-45.5, Apr. 14, 1997
- "Closed-loop power control in CDMA systems; Lee, C.C.; Steele, R.,
- A CDMA-based radio access design for UMTS, Andermo et al., IEEE Journal on Personal Communications, vol. 2, No. 1, pgs. 48-53 (February 1995)
- A coherent detection system with a suppressed pilot channel for DS/CDMA systems, Sadayuki Abeta, Seiichi Sampei and Norihiko Morinaga (Faculty of Engineering, Osaka Univ.), The Transaction of the Institute of Electronics, Information and Communication Engineers, Vol. J77-B-II No.11 Nov. 1994
- A Comparison of CDMA Techniques for Third Generation Mobile Radio Systems, Swales, et al., IEEE, 1993
- A Comparison of Pseudo-Noise and Conventional Modulation for Multiple-Access Satellite Communications," IBM Journal, pp. 241-255, (Jul. 1965).
- A New Acquisition Scheme for DS Spread Spectrum System Using a Saw Convolver, Shi et al., IEEE Global Telecommunications Conference, pp. 611-614 (Nov. 15-18, 1987).
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- A New Slotted Aloha Based Random Access Method for CDMA Systems, Esmailzadeh et al., 1997 IEEE 6th International Confer-ence on Universal Personal Communications Record, vol. 1, pp. 43-47 (Oct. 12-16, 1997).
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- An All-Digital Receiver for Satellite Audio Broadcasting Signals Using Trellis Coded Quasi-Orthogonal Code-Division Multiplexing, European Transactions on Telecommunications and Related Technologies, vol. 4 , No. 1, pp. 23-32, (Feb. 1993).
- An Analysis of CDMA with Imperfect Power Control", IEEE 42nd Vehicular Technology Conference, vol. 2, pp. 977-980 (May 1993).
- An Open Multi-Rate Radio Interface based on DS-CDMA," RACE Mobile Telecommunications Workshop at 123 (June 1993)
- Association of Radio Industries and Business (ARIB), Specifications of Air-Interface for 3G Mobile System, vol. 3, ver. 1.0, (Jan. 14, 1999).
- Automatic transmitting power control for outage-free digital microwave radio, Takao Okuno, Mitsuhiro Baba, Masaaki Fukushi, Takahiko Miyajima (NTT Radio Communication Systems Lab.), NTT R&D Vol.39 No.39, Nov. 1990
- Baseband Processing for the CODIT Testbed, Chau et al., RACE Mobile Telecommunications Workshop at 244 (May 1994)
- Broadband-CDMA: ONEPHONE for a Wireless Twenty First Century, IEEE International Conference on Personal Wireless Communications, pp. 1-5 (Aug. 18-19, 1994).
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- Capacity Analysis of Spectrally Overlaid Multiband CDMA Mobile Networks, Jeong et al., IEEE Transactions on Vehicular Technology, vol. 47, No. 3, pp. 798-807 (Aug. 1998).
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4. All asserted claims of the ‘966 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make and use the alleged invention. For example, at least the following limitation of claim 1 of the ‘966 patent is indefinite, not enabled, and/or lacks adequate written description: “the transmitter further configured such that the transmitter transmits to the base station a message indicating to the base station that the subscriber unit wants to establish the communications with the base station over the communication channel to be indicated by the base station”; at least the following limitation of claim 9 of the ‘966 patent is indefinite, not enabled, and/or lacks adequate written description: “wherein the communication channel is indicated by the base station in response to the message”; and at least the following limitation of claim 11 of the ‘966 patent is indefinite, not enabled, and/or lacks adequate written description: “wherein the transmitter is further configured such that, subsequent to the subscriber unit receiving the indication, the transmitter transmits a message uniquely identifying the subscriber unit to the base station.”

B. United States Patent No. 7,286,847

5. On information and belief, and subject to further discovery, the asserted claims of the ‘847 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

6. All asserted claims of the ‘847 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the ‘847 patent and related applications; prior art references disclosed by InterDigital during

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7. All asserted claims of the ‘847 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make

and use the alleged invention. For example, at least the following limitation of claims 1-3 of the '847 patent is indefinite, not enabled, and/or lacks adequate written description: "wherein, prior to receiving the indication, the subscriber unit is not uniquely identified to the base station"; at least the following limitation of claim 2 of the '847 patent is indefinite, not enabled, and/or lacks adequate written description: "the transmitter transmits to the base station a message indicating to the base station that the subscriber unit wants to establish a radio connection with the base station over a communication channel to be indicated by the base station"; at least the following limitation of claim 3 of the '847 patent is indefinite, not enabled, and/or lacks adequate written description: "the transmitter further configured such that, subsequent to the subscriber unit receiving the indication, the transmitter transmits a signal generated using a remainder of the code"; and at least the following limitations of claim 5 of the '847 patent is indefinite, not enabled, and/or lacks adequate written description: "the transmitter transmits to the base station a message indicating to the base station that the subscriber unit wants to establish the communications with the base station over the communication channel to be indicated by the base station."

C. United States Patent No. 8,009,636

8. On information and belief, and subject to further discovery, the asserted claims of the '636 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

9. All asserted claims of the '636 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the '636 patent and related applications; prior art references disclosed by InterDigital during prosecution of those applications; prior art references identified in prior investigations or

litigations involving the ‘966 patent; and/or one or more of the following prior art references, taken alone or in combination:

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10. All asserted claims of the ‘636 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make

and use the alleged invention. For example, at least the following limitation of claim 1 of the '636 patent is indefinite, not enabled, and/or lacks adequate written description: "the transmitter successively sends transmissions wherein each of the transmissions are derived from a first length of a plurality of chips . . . the transmitter sends a subsequent transmission derived from a second length of the plurality of chips, wherein the first length is less than the second length"; at least the following limitation of claim 4 of the '636 patent is indefinite, not enabled, and/or lacks adequate written description: "wherein the plurality of chips are chips that are not used for spreading"; at least the following limitations of claim 29 of the '636 patent are indefinite, not enabled, and/or lacks adequate written description: "the transmitter successively sends transmissions having a first plurality of chips . . . the transmitter sends a transmission having a second plurality of chip . . . wherein the first plurality of chips has fewer chips than the second plurality of chips," and "wherein the first plurality of chips and the second plurality of chips are derived from a third plurality of chips"; and at least the following limitation of claim 31 of the '636 patent is indefinite, not enabled, and/or lacks adequate written description: "wherein the third plurality of chips are chips that are not used for spreading."

D. United States Patent No. 7,706,830

11. On information and belief, and subject to further discovery, the asserted claims of the '830 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

12. All asserted claims of the '830 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the '830 patent and related applications; prior art references disclosed by InterDigital during prosecution of those applications; prior art references identified in prior investigations or

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13. All asserted claims of the ‘830 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make

and use the alleged invention. For example, at least the following limitations of claims 1 and 6 of the ‘830 patent are indefinite, not enabled, and/or lacks adequate written description: “the transmitter further configured such that the transmitter sends to the base station a message indicating to the base station that the subscriber unit wants to establish the communications with the base station over the communication channel to be indicated by the base station,” and “wherein the same sequence of chips is not used to increase bandwidth”; at least the following limitation of claims 6 and 21 of the ‘830 patent is indefinite, not enabled, and/or lacks adequate written description: “wherein the sequence of chips is used to convey information to the base station to facilitate establishment of the communication channel to be indicated by the base station”; at least the following limitations of claims 16 and 21 of the ‘830 patent are indefinite, not enabled, and/or lacks adequate written description: “wherein the message indicates to the base station that the subscriber unit wants to establish the communications with the base station over the communication channel to be indicated by the base station,” and “wherein each of the successively sent transmissions and the message are produced using portions of a same sequence of chips that is not used to increase bandwidth”; and at least the following limitation of claims 1, 6, 16 and 21 of the ‘830 patent is indefinite, not enabled, and/or lacks adequate written description: “wherein each of the successively sent transmissions is shorter than the message.”

E. United States Patent No. 7,941,151

14. On information and belief, and subject to further discovery, the asserted claims of the ‘151 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

15. All asserted claims of the ‘151 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the

‘151 patent and related applications; prior art references disclosed by InterDigital during prosecution of those applications; and/or one or more of the following prior art references, taken alone or in combination:

- U.S. Patent Pub. No. 20020194571
- U.S. Patent Pub. No. 20030050074
- U.S. Patent Pub. No. 20040085924
- U.S. Patent Pub. No. 20050100038
- U.S. Patent No. 5237610
- U.S. Patent No. 5313467
- U.S. Patent No. 5729541
- U.S. Patent No. 5862160
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16. All asserted claims of the ‘151 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make and use the alleged invention. For example, at least the following limitation of claim 1 of the ‘151 patent is indefinite, not enabled, and/or lacks adequate written description: “both downlink channel assignment information and uplink channel assignment information being received via the same physical downlink control channel.”

F. United States Patent No. 7,616,970

17. On information and belief, and subject to further discovery, the asserted claims of the ‘970 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

18. All asserted claims of the ‘970 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the ‘970 patent and related applications; prior art references disclosed by InterDigital during prosecution of those applications; prior art references identified in prior investigations or litigations involving the ‘970 patent; and/or one or more of the following prior art references, taken alone or in combination:

- US 5,508,998
- US 5,602,827
- US 5,636,140
- US 5,768,695
- US 5,912,891
- US 6,222,852
- US 6,243,581
- US 6,424,834
- US 6,477,156
- US 6,496,531

- US 6,574,239
- US 6,681,259
- US 6,717,926
- US 6,735,217
- US 6,850,512
- US 7,606,243
- US 7,894,475
- US 20100046436
- Crow B.: “IEEE 802.11 Wireless Local Area Networks,” IEEE Comm. Magazine, September 1997
- Tuch B.: “An IEEE 802.11 Primer,” Comm. Sys. Design, 1997.

19. All asserted claims of the ‘970 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make and use the alleged invention. For example, at least the following limitation of claim 1 of the ‘970 patent is indefinite, not enabled, and/or lacks adequate written description: “wherein the cellular layered communication protocol includes a plurality of layers above a physical layer, and a plurality of physical layer channels are available for assignment for communication with the cellular network and a communication session above the physical layer is maintained when all assigned physical layer channels have been released”; and at least the following limitation of claim 10 of the ‘970 patent is indefinite, not enabled, and/or lacks adequate written description: “wherein a plurality of physical layer channels are available for assignment for communication with the first wireless network, and to maintain a communication session above a physical layer of the first protocol stack when none of the plurality of physical layer channels are assigned.”

G. United States Patent No. 7,502,406

20. On information and belief, and subject to further discovery, the asserted claims of the ‘406 patent are each invalid for failure to meet the requirements of 35 U.S.C. §§ 102, 103, and/or 112.

21. All asserted claims of the ‘406 patent are invalid under 35 U.S.C. §§ 102 and/or 103 in view of at least the prior art references cited by the examiner during the prosecution of the ‘406 patent and related applications; prior art references disclosed by InterDigital during prosecution of those applications; prior art references in prior investigations or litigations involving the ‘406 patent; and/or one or more of the following prior art references, taken alone or in combination:

- US 4,228,538
- US 5,333,175
- EP 0265178
- EP 0610030
- GB 2229609
- WO1992022157
- WO1992022161
- WO1993017507
- WO1993021739
- WO1994000927
- WO1994006217
- WO1994013069
- WO1994018756
- WO1995012297
- European Telecommunications Standards Institute (ETSI): “MS Transmitter Power Control”, Input paper RES6.2(93)59, January 28, 1993
- European Telecommunications Standards Institute (ETSI): PN-3118, September 12, 1993
- Gilhousen K., “Mobile Power Control for CDMA,” Communications, January 1992
- Gilhousen et al.: “On the Capacity of a Cellular CDMA System,” IEEE Trans. on Vehicular Tech., Vol. 40, No. 2, May 2, 1991
- Salmasi et al.: “On the System Design Aspects of Code Division Multiple Access (CDMA) Applied to Digital Cellular and Personal Communications Networks,” IEEE 1991
- Viterbi et al.: “Performance of a Nonparametric Power Allocation Algorithm for Wideband Terrestrial Digital Communication,” Proceedings of the IEEE Conference on Decision and Control, Vol. 3, 1994
- Viterbi et al.: “Performance of Power-Controlled Wideband Terrestrial Digital Communication,” IEEE Trans. On Comm’ns, Vol. 41, No. 4, April 1993
- Vojcic et al.: “Power Control Versus Capacity of a CDMA System Operating Over a Low Earth Orbiting Satellite Link,” IEEE Global Telecommunications Conference, Vol. 4, 1993

- Wang et al.: "Interference Avoidance and Power Control Strategies for Coded Frequency Hopped Cellular Systems," IEEE Int'l Conference on Comm'ns, Vol. 3, June 18-22, 1996.

22. Samsung's investigation is ongoing. Samsung may also rely on prior art cited in prior investigations and litigations involving the '406 patent.

23. All asserted claims of the '406 patent are invalid for failure to comply with the requirements of 35 U.S.C. § 112 due to lack of written description, failure to particularly point out and distinctly claim the subject matter which is regarded as the alleged invention, and/or failure to set forth a written description sufficient to enable any person skilled in the art to make and use the alleged invention. For example, at least the following limitation of claim 1 of the '406 patent is indefinite, not enabled, and/or lacks adequate written description: "in response to the received power control bit, adjusting a transmission power level of both the traffic channel and the reverse control channel, wherein the transmission level of the traffic channel and the reverse control channel are different"; at least the following limitation of claim 7 of the '406 patent is indefinite, not enabled, and/or lacks adequate written description: "adjusting a transmission power level of both the traffic channel and the reverse control channel in response to the same bits in the received series of power control bits, wherein the transmission power level of the traffic channel and the reverse control channel are different"; at least the following limitation of claim 15 of the '406 patent is indefinite, not enabled, and/or lacks adequate written description: "gain devices configured, in response to the received power control bit, to adjust a transmission power level of both a traffic channel and a reverse control channel prior to transmission by the subscriber unit, wherein the transmission power level of the traffic channel and the reverse control channel are different"; at least the following limitation of claim 21 of the '406 patent is indefinite, not enabled, and/or lacks adequate written description: "gain devices configured, in response to the received series of power control bits, to adjust a transmission

power level of both a traffic channel and a reverse control channel in response to same bits in the received series of power control bits prior to transmission by the subscriber unit, wherein the transmission power level of the traffic channel and the reverse control channel are different"; at least the following limitation of claim 29 of the '406 patent is indefinite, not enabled, and/or lacks adequate written description: "in response to the received power control bit, adjusting a transmission power level of both the traffic channel and the reverse control channel, separately adjusting the transmission power level of the traffic channel and the reverse control channel;" and at least the following limitation of claim 35 of the '406 patent is indefinite, not enabled, and/or lacks adequate written description: "gain devices configured, in response to the received power control bit, to adjust a transmission power level of both a traffic channel and a reverse control channel prior to transmission by the subscriber unit, and the gain devices being configured to separately adjust the transmission power level of the traffic channel and the reverse control channel."

SECOND AFFIRMATIVE DEFENSE
(Non-Infringement)

24. Samsung has not imported, sold for importation, or sold within the United States after importation, any product that is covered by any valid and enforceable claim of the Asserted Patents. Samsung does not infringe, or induce infringement of, any valid and/or enforceable claim of the Asserted Patents under one or more provisions of Title 35 U.S.C. § 1, *et seq.*

THIRD AFFIRMATIVE DEFENSE
(Lack of Domestic Industry)

25. Complainants have not adequately alleged and cannot establish the existence of a domestic industry for the Asserted Patents as required by Section 337(a)(2) and defined by Section 337(a)(3). Complainants cannot establish a "substantial investment" in licensing,

research and development or other qualifying activities relating to the Asserted Patents, sufficient to satisfy the economic prong of the domestic industry requirement.

FOURTH AFFIRMATIVE DEFENSE
(Failure to State a Claim Upon Which Relief Can Be Granted)

26. Complainants are precluded from obtaining a finding of violation and issuance of any relief on their Complaint because the Complaint fails to state a claim upon which relief can be granted.

FIFTH AFFIRMATIVE DEFENSE
(Estoppel)

27. Complainants' claims against Samsung are barred, in whole or in part, by prosecution history estoppel.

SIXTH AFFIRMATIVE DEFENSE
(Inequitable Conduct)

28. On information and belief, as alleged below, the '151 Patent, including all of the '151 Patent claims asserted against Samsung is unenforceable under the doctrine of inequitable conduct.

29. In particular, during prosecution of the '151 Patent, at least two of the three named inventors, Marian Rudolf and Stephen Dick, deliberately withheld printed publications demonstrating that the subject matter of one or more claims of the '151 Patent was invented earlier by other participants in the organization responsible for developing the LTE cellular standard. If those publications had been disclosed to the Patent and Trademark Office (PTO), as required by rules of PTO practice, one or more claims of the '151 Patent would not have been allowed.

30. Marian Rudolf, Stephen Dick and Phillip J. Pietraski are listed as inventors on the '151 Patent.

31. The ‘151 Patent claims priority to a provisional application filed on Nov. 18, 2003.

32. InterDigital Technology Corporation is identified as the assignee on the face of the ‘151 Patent.

33. Cellular standards, such as the LTE standard that InterDigital accuses of infringing the ‘151 Patent, are developed by “Standards-Setting Organizations” (SSOs), made up of participants from companies, such as InterDigital and the Respondents in this investigation, that do business in the cellular space.

34. Cellular standards are complex, and govern many aspects of the operation of cellular devices and cellular network equipment. Each section of a standard is developed by a “working group” with expertise in the technical field for that section. For example, certain working groups have expertise in the efficient use of the radio frequency spectrum, and contribute to the portions of the standard that include the RF specification. Other working groups have expertise in other areas, such as the way in which data is encoded for accurate and efficient transmission over the air.

35. The working group responsible for developing the portion of the LTE standard accused of infringing the ‘151 Patent is called TSG Radio Access Network Working Group 1 (“TSG-RAN Working Group 1”, hereinafter referred to as the “working group”) and the group met on multiple occasions in 2002 and 2003 to discuss proposals for the standard under development at the time (high-speed uplink packet access). Prior to each such discussion, the members of the working group drafted written submissions outlining their proposals. Those submissions were distributed to all of the members of the working group, including

representatives from InterDigital and at least two of the named inventors on the '151 Patent, Marian Rudolf and Stephen Dick.

36. Two of the named inventors, Marian Rudolf and Stephen Dick, also attended many of the Working Group 1 meetings that occurred just before the '151 Patent's claimed priority date. Marian Rudolf attended Working Group 1 meetings held on October 8, 2002, November 5, 2002, January 7, 2003, February 18, 2003, May 19, 2003, August 25, 2003, October 6, 2003, and November 7, 2003. *See* Exhibits B-I. Stephen Dick attended Working Group 1 meetings on October 8, 2002, November 5, 2002, August 25, 2003, and November 7, 2003. *See* Exhibits B, C, G, I.

37. One of the issues addressed by Working Group 1 was how to efficiently assign network resources to multiple cellular devices, all of which need to send and receive data. *See* Exhibit J.

38. A cellular network shares the available transmission "bandwidth" (i.e., the network's capacity for sending and receiving data) among multiple cellular devices. The allocation of bandwidth is under the control of the cellular network; when a cellular telephone wants to send and receive data such as emails or text messages, it must first ask the network for a share of the available bandwidth.

39. The network responds to the cellular telephone's request for bandwidth by sending messages on a special "channel" that is dedicated to sending "control" messages to cellular telephones, sometimes referred to as a control channel.

40. In many cases, the control channel is shared by multiple cellular devices. When multiple cellular devices share a control channel, each device must be able to receive and interpret messages that are addressed to it. The '151 Patent explains how that was done for the

downlink control channel in the version of the standard (Release 5) that predates the one accused of infringement in this investigation. In that previous version, called "HSDPA" the downlink control channel sent control messages out to multiple cellular devices, and distinguished among those devices by using a user specific identification. '151 Patent at 1:24–28, 1:54–55 (describing the prior art "HSDPA" method of identifying a specific "WTRU" (UE) in an HS-SCCH transmission, as part of "Release 5 (R5)" WCDMA systems). The user specific identification was used to mask a cyclic redundancy check (CRC) value. *Id*. This description of using a masked, device-specific CRC value is in the "Background" section of the specification of the '151 Patent, and was known in the prior art. *Id.* at 1:24–2:12 (discussing alleged problems with prior art cellular systems, including the prior art HS-SCCH system employing the WTRU-specific CRC value.).

41. It is possible to employ a first control channel for sending a message to a cellular device indicating when it is allowed to download data, also known as "downlink," and a second control channel to instruct a cellular device when it may upload data, also known as "uplink."

42. In late 2002 and early 2003, the working group discussed using a single control channel for sending messages to cellular devices about the assignment of both uplink and downlink bandwidth. The single control channel under discussion during that time period would also be shared by multiple cellular devices. It was therefore suggested that, when the network sent out messages on the control channel, each cellular device would successfully interpret only those messages that are addressed to it.

43. In particular, in October, 2002, at a TSG-RAN Working Group 1 meeting attended by Marian Rudolf and Stephen Dick, Motorola submitted a proposal for how to use a single control channel to transmit control messages for both the uplink and downlink directions.

See Exhibit N. The Motorola Proposal is titled "Uplink enhancements for dedicated transport channels."

44. The Motorola Proposal suggests using the control channel previously used for downlink transmissions—a control channel called the "HS-SCCH"—to send messages related both to downlink transmissions (on the downlink channel called the "HS-DSCH") and to uplink transmissions (on an uplink channel called "EUDTC"). The relevant passage is as follows:

> "6. Control channel design to support EUDTC:
>
> One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH. The second option is to define a new set of control channels to support EUDTC operation. Finally, the third option is to use 10 msec frame size. Further, the design of control channels when the UE is in soft-handoff should be addressed." Motorola Proposal at 2 (emphasis added).

45. As can be seen from the underlined portion, the Motorola Proposal suggests "piggyback[ing]" the uplink control information onto the existing downlink control channel, thus sharing the same control channel for messages pertaining to transmission in the uplink and downlink directions.

46. The Motorola Proposal also defines how to do so: by having a frame format for transmissions pertaining to the uplink direction that is different from the format used for transmissions pertaining to the downlink direction: "This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH."

47. Finally, the Motorola Proposal states that it will "use the control channels for Rel-5 HS-DSCH" (i.e., the prior art "Release 5" version of the HSDPA standard) to distinguish between particular UEs receiving signals on the shard control channel. As discussed above in the context of the admitted prior art in the Background section of the '151 Patent, the control

channel used to govern transmission on the "HS-DSCH" in Release 5 of HSPDA—the HS-SCCH—used a UE-specific CRC value.

48. In sum, the Motorola Proposal teaches using a single control channel for both uplink and downlink messages, distinguishing between uplink and downlink messages using different message "formats," and identifying a specific recipient for the message by using a device-specific CRC value as specified in the previous "Release 5" version of the standard.

49. Marian Rudolf and Stephen Dick attended the Working Group 1 meeting at which the Motorola Proposal was presented and received copies of the Motorola Proposal. Marian Rudolf and Stephen Dick were aware as of October 2002 that the scheme of using a single control channel for both the uplink and the downlink, and distinguishing between uplink control transmissions and downlink control transmissions through the use of different message formats, was already invented by others. *See* Exhibit B.

50. In January 2003, at a TSG-RAN Working Group 1 meeting attended by Marian Rudolf, Siemens submitted a proposal for how to use a single "control channel" to transmit messages to multiple cellular devices and grant individual cellular devices permission to transmit in the uplink and downlink directions. *See* Exhibit K.

51. The Siemens Proposal discloses using a single control channel to send both uplink and downlink control information. In particular, the Siemens Proposal suggests re-using the preexisting downlink control channel (the "HS-SCCH") to send messages pertaining both to the downlink channel (the "HS-DSCH") and to the uplink channel (the "EU-DCH"):

> 2. Re-use of HS-SCCH
>
> Re-using the existing HSDPA downlink control channel (HS-SCCH) is a means to alleviate the downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. This is achieved by reusing the downlink HS-SCCH also for downlink control information of EU-DCH (denoted as EU-SCCH

> in the sequel). Consequently, EU-SCCH uses also a 3-slot format and is time-aligned at Node B with HS-SCCH transmissions. This particular format for EU-DCH associated downlink control information allows the same shared control channel to be used for EU-DCH and HSDPA users in time multiplex.

Siemens Proposal at 1 (emphasis added).

52. Moreover, the Siemens Proposal points out that transmissions pertaining to the downlink direction can be distinguished from transmissions pertaining to the uplink direction by making use of pre-existing data structures used to store the "channelisation code-set field" which previously contained 7 bits of data representing the channelization code set. *Id.* By using a value for the channelization code set that was "unused" in the previous version of the standard, the Siemens Proposal allows the network to specify to a cellular device (referred to in the Siemens Proposal as "user equipment," or "UE") that the transmission relates to the uplink (EU-DCH) direction: "As shown in Fig. 1, the HS-SCCH part 1 provides 8 unused codewords within the channelisation code-set field (denoted as "redundant area" in Fig. 1, [1]), which could be used for EU-DCH downlink signalling." *Id.* Figure 1 is a table showing the unused codes, in the "Redundant area":

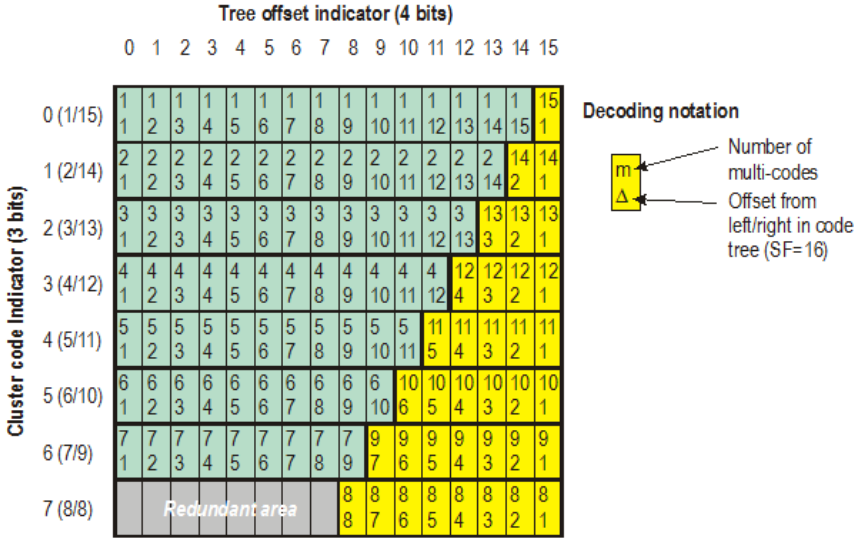


Fig 1: Reuse of the redundant area of HS-SCCH part 1 for downlink signalling of EU-DCH

53. Finally, the Siemens Proposal suggests using the pre-existing HS-SCCH coding format to specify the particular user equipment ("UE") that is intended to receive the transmission. "A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. . . . A major benefit of the re-use of HS-SCCH channel and coding format is that the detection based on the implicit UE-ID and decoding of part 1 is identical for HSDPA and EU-DCH data transmission and receiver implementation is notably simplified." Siemens Proposal at 1–2. As discussed above, as admitted in the Background section of the '151 Patent, the existing coding structure for HS-SCCH used a UE-specific CRC value that is generated from Part 1 and Part 2 of the HS-SCCH.

54. In sum, the Siemens Proposal teaches using a single control channel for both uplink and downlink messages, distinguishing between uplink and downlink messages using different message "formats," and identifying a specific recipient for the message by using the preexisting coding structure of HS-SCCH, as specified in the previous HSDPA version of the standard.

55. Marian Rudolf attended the Working Group 1 meeting at which the Siemens Proposal was presented and received copies of the Siemens Proposal. Marian Rudolf was aware as of January 2003 that the scheme of using a single control channel for both the uplink and the downlink, by distinguishing between uplink control transmissions and downlink control transmissions through the use of the "unused" codewords in the previous version of the standard, was already invented by others. *See* Exhibit D.

56. InterDigital filed a provisional application with the PTO on November 18, 2003. *See* Exhibit L [hereinafter the "Provisional Application"]. The Provisional Application is titled "Novel Resource Assignment Channel Configuration for Enhanced Uplink Operation." *Id.* at 7.

57. Like the Motorola Proposal and the Siemens Proposal, the Provisional Application describes a way to use a single shared control channel to send transmissions pertaining to both the downlink and uplink directions: "The foregoing and other shortcomings of the prior art are resolved by providing a high speed shared control channel (HS-SCCH) and an uplink (UL) resource assignment channel· in a shared downlink (DL) radio resource space, and by distinguishing received high speed shared control channel (HS-SCCH) transmissions from uplink (UL) resource assignment channel transmissions." Provisional Application ¶ 0018 (emphasis added here and in all cases below).

58. One of the preferred embodiments of the Provisional Application is identical in all relevant respects to the shared control channel described in the Siemens Proposal, and several embodiments use the approach to distinguishing between the uplink and downlink directions discussed in the Motorola Proposal.

59. Both the Motorola Proposal and the Provisional Application describe using a single control channel that employs conventional HS-SCCH transmissions for the downlink (i.e., the same transmissions used in the prior art Release 5 version of the standard) and UL Resource Assignment transmissions for the uplink. Likewise, both the Siemens Proposal and the Provisional Application describe using a single control channel that employs conventional HS-SCCH transmissions for the downlink (i.e., the same transmissions used in the prior art version of the HSDPA standard) and UL Resource Assignment transmissions for the uplink (emphasis added in all cases).

Provisional Application	**Motorola Proposal**	**Siemens Proposal**
"The foregoing and other shortcomings of the prior art are resolved by providing a high speed shared control	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback	"Re-using the existing HSDPA downlink control channel (HS-SCCH) is a means to alleviate the

channel (HS-SCCH) and an uplink (UL) resource assignment channel in a shared downlink (DL) radio resource space, and by distinguishing received high speed shared control channel (HS-SCCH) transmissions from uplink (UL) resource assignment channel transmissions." ¶ 0018.	the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.	downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. This is achieved by reusing the downlink HS-SCCH also for downlink control information of EU-DCH (denoted as EU-SCCH in the sequel)." Siemens Proposal at 1.

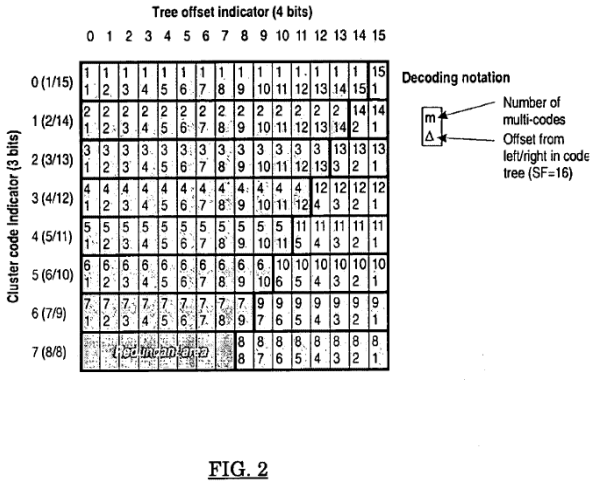
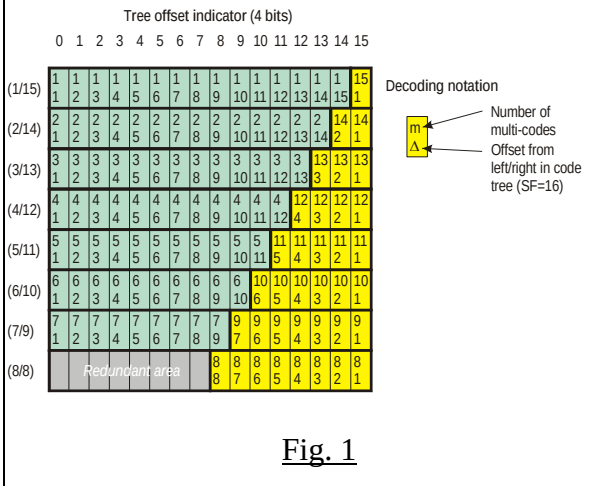
60. In several embodiments of the Provisional Application, and in the Motorola Proposal, the UE can, in the phrasing used by the Provisional Application, "distinguish" between transmissions related to the downlink and transmissions related to the uplink by looking at the format of the frame transmitted on the shared control channel. In at least the first, second, and third disclosed embodiments of the Provisional Application, the direction for the control signal is specified by the format of the frame.

Provisional Application	**Motorola Proposal**
"Pursuant to the techniques of the present invention, any of several methods may be employed to distinguish HS-SCCH transmissions from DL Resource Assignment channel transmissions. These methods include: (a) channel indication by means of selecting one or more 'impossible' combinations in channelization code set mapping, (b) inversion of DE-specific cyclic redundancy check (CRC), (c) utilizing different DE-specific masking sequences . . ." Provisional Application ¶ 0020; *see generally* ¶¶ 0033–0035 (describing "Method 1," "Method 2," and "Method 3" for distinguishing between the uplink and downlink channels).	"This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.

61. Likewise, in the first embodiment of the Provisional Application, and in the Siemens Proposal, the UE can distinguish between transmissions related to the downlink and transmissions related to the uplink by using special values in an unused field in the previous version of the HSDPA standard. Both the Provisional Application and the Siemens Proposal explain how this distinguishing can take place: by looking to see whether one of the fields of the transmission—the "channelisation code-set" field—is one of eight codewords that are "unused" or "impossible" in the prior art implementation:

Provisional Application	**Siemens Proposal**
"Pursuant to the techniques of the present invention, any of several methods may be employed to distinguish HS-SCCH transmissions from DL Resource Assignment channel transmissions. These methods include: (a) channel indication by means of selecting one or more 'impossible' combinations in channelization code set mapping . . ." Provisional Application ¶ 0020; *see generally* ¶ 0033 (describing "Method 1" for distinguishing between the uplink and downlink channels, using "One or more 'Impossible' Combinations in the Channelization Code Set Mapping").	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. This is possible if the signalling payload is four bits or less. As shown in Fig. 1, the HS-SCCH part 1 provides 8 unused codewords within the channelisation code-set field (denoted as 'redundant area' in Fig. 1, [1]), which could be used for EU-DCH downlink signalling." Siemens Proposal at 1.

62. Indeed, the figure used to depict the "impossible combinations" in the Provisional Application is copied and pasted from the figure used in the Siemens Proposal to depict the "8 unused codewords":

Provisional Application	Siemens Proposal
 FIG. 2	 Fig. 1

63. Finally, in both the Motorola Proposal and the Siemens proposal, the shared downlink channel relies on the same prior art method for confirming which UE a transmission is directed to that is used in the Provisional Application: using the user-specific identification in the same manner it was used in the preexisting HS-SCCH structure.

Provisional Application	Motorola Proposal	Siemens Proposal
"Confirmation that a demodulated transmission is intended for the UE is obtained using a UE-specific CRC." ¶ 0025. "The R5 HS-SCCH is sent . . . along with a UE-specific cyclic redundancy check (CRC) (see 3GPP TS25.212)." ¶ 0008 (discussing the HS-SCCH in the prior art HSDPA system).	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used." "A major benefit of the re-use of HS-SCCH channel and coding format is that the detection based on the implicit UE-ID and decoding of part 1 is identical for HSDPA and EU-DCH data transmission and receiver implementation is notably simplified."

		Siemens Proposal at 1–2.

64. Moreover, both the Provisional Application and the Siemens Proposal argue that transmitting uplink control messages on the same channel already used for downlink control messages has performance and efficiency benefits—namely, the UE can have reduced complexity and better performance because it only needs to monitor a single control channel.

Provisional Application	**Siemens Proposal**
"In a straightforward extension of existing R5 mechanisms, UL Resource Assignment Channel's for FDD Enhanced UL could be introduced 'on top' of existing HS-SCCH's for HSDPA. In other words, a separate set of SF=128 DL channels are configured to contain one or more UL Resource Assignment Channels. With this approach, in a typical HSDPA operation scenario, a UE would then be required to monitor one or several UL Resource Assignment Channels in addition to the up to 4 HS-SCCHs it must already monitor." ¶ 0014. "Relative to the prior art approaches described hereinbefore, a high speed shared control channel (HS-SCCH) and an uplink (UL) resource assignment channel that occupy a shared downlink (DL) radio resource space reduces UE complexity increases UE battery efficiency, and permits enhanced DL spreading code usage." ¶ 0019.	"Re-using the existing HSDPA downlink control channel (HS-SCCH) is a means to alleviate the downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. . . . Additionally it decreases UE complexity, since less control channels need to be monitored in cases where HS-DSCH and EU-DCH are used concurrently." Siemens Proposal at 1.

65. Thus the Provisional Application, like the Motorola Proposal and the Siemens Proposal, describes using a single control channel for both uplink and downlink messages, distinguishing between uplink and downlink messages using different message formats (including, as in the Siemens Proposal, different values for the "channelization code set" field), and identifying a specific recipient for the message by using the pre-existing HS-SCCH coding structure, which included a device-specific CRC value. And the Provisional Application and the Siemens Proposal cite precisely the same benefits from doing so.

66. The Provisional Application also includes claims. Claim 1 purports to cover the process already disclosed in the Motorola Proposal and the Siemens Proposal:

> 1. A method for communicating with a user equipment (UE) over a wireless link comprised of a downlink (DL) and an uplink (UL), the method comprising the steps of:
>
> (a) sharing at least a portion of the DL so as to provide a high speed shared control channel (HS-SCCH) and an UL resource assignment channel, and
>
> (b) distinguishing received high speed shared control channel (HS-SCCH) transmissions from uplink (UL) resource assignment channel transmissions.

67. This claim recites the same basic three elements already discussed: a control channel for both "HS-SCCH" and "uplink (UL)" control messages; "distinguishing" transmissions related to the HS-SCCH from transmissions related to the uplink; and "sharing" the channel among multiple UEs. This claimed process is identical to what is disclosed in the Motorola Proposal and the Siemens Proposal.

68. InterDigital filed the nonprovisional application, which ultimately issued as the '151 Patent, on July 29, 2004. *See* Exhibit M. Both the Motorola Proposal and the Siemens

Proposal describe preferred embodiments of the '151 Patent. And like the Provisional Application, the '151 Patent includes material taken directly from the Siemens Proposal.

69. In particular, both the '151 Patent and the Motorola Proposal describe using a single control channel that employs conventional HS-SCCH transmissions for the downlink (i.e., the same transmissions used in the prior art Release 5 version of the standard) and UL Resource Assignment transmissions for the uplink. Likewise, both the '151 Patent and the Siemens Proposal describe using a single control channel that employs conventional HS-SCCH transmissions for the downlink (i.e., the same transmissions used in the prior art version of the HSDPA standard) and UL Resource Assignment transmissions for the uplink.

'151 Patent	**Motorola Proposal**	**Siemens Proposal**
"The WTRU communicates with the Node-B via a common control channel, the UL channel and the DL channel. The WTRU receives a message from the Node-B via the common control channel. The message includes an indication of whether the message is intended for assigning radio resources to the UL charmel or the DL channel." 2:20–25. "The Node-B 104 is configured to support an HSDPA and EU operation. Therefore, each Node-B 104 dynamically allocates radio resources for DL and UL transmissions to and from the WTRU 106 through an HS-DSCH and an EU channel, respectively. The radio resources assignment information for both the HS-	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to <u>piggyback</u> the control information required for EUDTC. This can be achieved by defining an additional frame format for <u>HS-SCCH</u> and HS-DPCCH." Motorola Proposal at 2.	"Re-using the existing HSDPA downlink control channel (HS-SCCH) is a means to alleviate the downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. <u>This is achieved by reusing the downlink HS-SCCH also for downlink control information of EU-DCH (denoted as EU-SCCH in the sequel)</u>." Siemens Proposal at 1.

DSCH and the EU is transmitted through the common control channel 112." 3:33–39. "High speed downlink packet access (HSDPA) has been developed to increase downlink (DL) efficiency and throughput in universal mobile telecommunication system (UMTS) Release 5 (R5) wideband code division multiple access (W-CD MA) systems. . . . The signaling channel, a high speed shared control channel (HS-SCCH), conveys radio resource allocation information to a plurality of wireless transmit/receive units (WTRUs)." 1:33–36.		

70. In several embodiments of the '151 Patent, as in the Motorola Proposal, the UE can distinguish between transmissions related to the downlink and transmissions related to the uplink by looking at the format of the frame transmitted on the shared control channel. In at least the first, second, and third disclosed embodiments of the '151 Patent, the direction for the control signal is specified by the format of the frame.

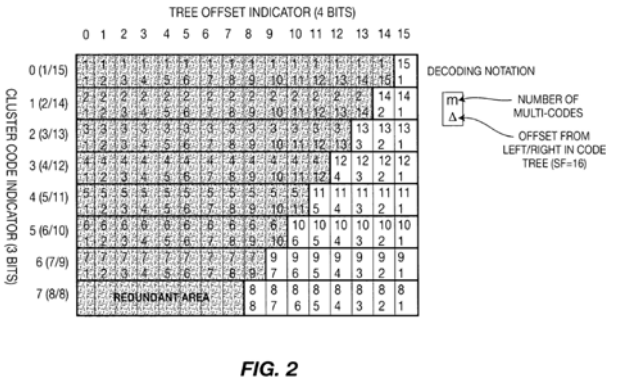
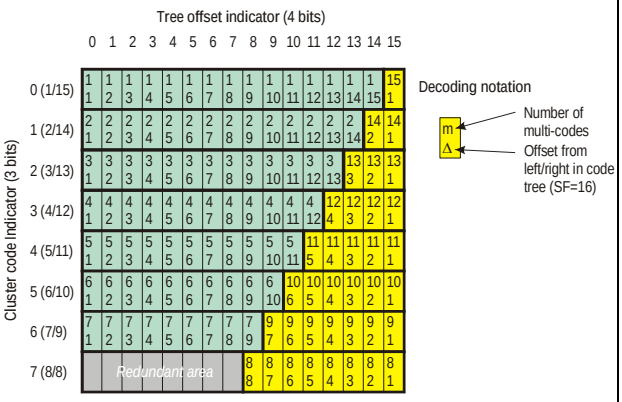
'151 Patent	**Motorola Proposal**
"In accordance with a first embodiment of the present invention, an indication that a particular radio resource is assigned for a UL transmission is provided by means of one or more of the impossible combinations in the channelization code set mapping in a current HSDPA." 3:51–55. "In accordance with the second embodiment of the present invention, this WTRU-specific	"This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.

CRC is modified in a unique and deterministic way to indicate that the demodulated transmission is for UL transmission, rather than DL transmission." 4:13–16. "In accordance with a third embodiment of the present invention, an indication that a particular radio resource is assigned for an EU is provided by means of a WTRU -specific masking sequence." 4:28–31.	

71. Also, as in the Siemens Proposal, the '151 Patent describes distinguishing between transmissions related to the downlink and transmissions related to the uplink, using the channelization code-set field.

'151 Patent	**Siemens Proposal**
"In accordance with a first embodiment of the present invention, an indication that a particular radio resource is assigned for a UL transmission is provided by means of one or more of the impossible combinations in the channelization code set mapping in a current HSDPA. FIG. 2 is a look-up table for channelization code set mapping currently used in the HSDPA." 3:51–57.	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. This is possible if the signalling payload is four bits or less. As shown in Fig. 1, the HS-SCCH part 1 provides 8 unused codewords within the channelisation code-set field (denoted as 'redundant area' in Fig. 1, [1]), which could be used for EU-DCH downlink signalling." Siemens Proposal at 1.

72. Figure 2 from the '151 Patent is carried over from Figure 2 of the Provisional Application, which in turn is taken from Figure 1 of the Siemens Proposal.

‘151 Patent	Siemens Proposal
 FIG. 2	 Fig. 1

73. Finally, in both the Motorola Proposal and the Siemens proposal, the shared downlink channel relies on the same prior art method for determining which UE a transmission is directed to that is used in the ‘151 Patent: looking at the preexisting structure of the HS-SCCH and specifically the use of user specific identification (UE-ID), which was used in the preexisting structure to mask the CRC.

‘151 Patent	Motorola Proposal	Siemens Proposal
“In accordance with a second embodiment of the present invention, an indication that a particular radio resource is assigned for UL transmission is provided by means of a WTRU-specific CRC. Under current HSDPA specifications, a WTRU-specific CRC is contained in an HS-SCCH field 2. A 16-bit CRC is computed from the information to be transmitted, and the computed CRC is masked with a unique 16-bit WTRU identity (ID). The	“One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH.” Motorola Proposal at 2.	“A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used.” “A major benefit of the re-use of HS-SCCH channel and coding format is that the detection based on the implicit UE-ID and decoding of part 1 is identical for HSDPA and EU-DCH data transmission and receiver implementation is notably simplified.”

masked CRC is transmitted to a WTRU 106 as a WTRU-specific CRC." 4:4–12.		Siemens Proposal at 1–2.

74. As with the Provisional Application, the '151 Patent argues that transmitting uplink control messages on the same channel already used for downlink control messages has the performance and efficiency benefits discussed in the Siemens Proposal—namely, the UE can have reduced complexity and better performance because it only needs to monitor a single control channel.

'151 Patent	**Siemens Proposal**
"Thus, it is possible to introduce a separate set of SF=128 DL channels as UL resource assignment channels. With this approach, a WTRU would be required to monitor one or more UL resource assignment channels in addition to the HS-SCCHs for an HSDPA operation. Although this approach is conceptually simple, there are many disadvantages with this scheme, such as WTRU complexity, WTRU battery efficiency, and DL spreading code usage." 2:3–9 (describing disadvantages of using two separate control channels, which are alleged to be overcome by the claimed invention).	"Re-using the existing HSDPA downlink control channel (HS-SCCH) is a means to alleviate the downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. . . . Additionally it decreases UE complexity, since less control channels need to be monitored in cases where HS-DSCH and EU-DCH are used concurrently." Siemens Proposal at 1.

75. Moreover, at least asserted independent claims 1 and 16 purport to cover the process already disclosed in the Motorola Proposal and in the Siemens Proposal.

76. The Motorola Proposal and the Siemens Proposal disclose a control channel for both downlink and uplink channel assignment information:

Claims	**Motorola Proposal**	**Siemens Proposal**
1. A method for utilizing channel assignment information for an uplink	"One of the options for control channel design of EUDTC is to use the control channels for	"Re-using the existing HSDPA downlink control channel (HS-SCCH) is a

shared channel or a downlink shared channel, the method comprising: a wireless transmit/receive unit (WTRU) receiving downlink control information including downlink or uplink channel assignment information via a same physical downlink control channel, both downlink channel assignment information and uplink channel assignment information being received via the same physical downlink control channel;	Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.	means to alleviate the downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. This is achieved by reusing the downlink HS-SCCH also for downlink control information of EU-DCH (denoted as EU-SCCH in the sequel)." Siemens Proposal at 1.

Claims	**Motorola Proposal**	**Siemens Proposal**
16. A wireless transmit/receive unit (WTRU) for utilizing channel assignment information for an uplink shared channel or a downlink shared channel, the WTRU comprising: a receiver configured to receive downlink control information including downlink or uplink channel assignment information via a same physical downlink control channel, both downlink channel assignment information and uplink channel assignment information being received via the same physical downlink control channel;	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.	"Re-using the existing HSDPA downlink control channel (HS-SCCH) is a means to alleviate the downlink code resource problem by providing trunking gain between EU-DCH and HS-DSCH users. This is achieved by reusing the downlink HS-SCCH also for downlink control information of EU-DCH (denoted as EU-SCCH in the sequel)." Siemens Proposal at 1.

77. The Motorola Proposal and the Siemens Proposal disclose "determining" whether the downlink control information is intended for the UE:

Claims	Motorola Proposal	Siemens Proposal
1. …the WTRU determining whether the downlink control information is intended for the WTRU based on WTRU identity (ID)-masked cyclic redundancy check (CRC) parity bits…	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2; *see* '151 Patent at 1:24–2:12 (indicating that the "HS-SCCH" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU).	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. . . . A major benefit of the re-use of HS-SCCH channel and coding format is that the detection based on the implicit UE-ID and decoding of part 1 is identical for HSDPA and EU-DCH data transmission and receiver implementation is notably simplified." Siemens Proposal at 1–2; *see* '151 Patent at 1:24–2:12 (indicating that "HSDPA" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU).

Claims	Motorola Proposal	Siemens Proposal
16. … a controller configured to determine whether the downlink control information is intended for the WTRU based on WTRU identity (ID)-masked cyclic redundancy check (CRC) parity bits…	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2; *see* '151 Patent at 1:24–2:12 (indicating that the "HS-SCCH" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU).	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. . . . A major benefit of the re-use of HS-SCCH channel and coding format is that the detection based on the implicit UE-ID and decoding of part 1 is identical for HSDPA and EU-DCH data transmission and receiver implementation is notably simplified." Siemens Proposal at 1–2; *see* at 1:24–2:12 (indicating that "HSDPA" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU).

78. As discussed above, it was known in the admitted prior art (described in the '151 Patent) that the existing "HSDPA" specifications use a WTRU-specific CRC in the "HS-SCCH" channel to identify transmissions intended for a particular WTRU.

Claims	Meaning of "HSDPA" to a Person of Ordinary Skill in the Art
1. …the WTRU determining whether the downlink control information is intended for the WTRU based on WTRU identity (ID)-masked cyclic redundancy check (CRC) parity bits…	"Under current HSDPA specifications a WTRU-specific CRC is contained in an HS-SCCH field 2." '151 Patent 4:7–8; *id.* 1:49–55 (indicating that the "HS-SCCH" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU); *id.* 1:24–2:12 (indicating that "HSDPA" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU).

Claims	Meaning of "HSDPA" to a Person of Ordinary Skill in the Art
16. … a controller configured to determine whether the downlink control information is intended for the WTRU based on WTRU identity (ID)-masked cyclic redundancy check (CRC) parity bits…	"Under current HSDPA specifications a WTRU-specific CRC is contained in an HS-SCCH field 2." '151 Patent 4:7–8; *id.* 1:49–55 (indicating that the "HS-SCCH" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU); *id.* 1:24–2:12 (indicating that "HSDPA" uses a CRC value specific to a WTRU to distinguish transmissions to that WTRU).

79. The Motorola Proposal and the Siemens Proposal disclose "determining" whether the channel assignment information is for uplink or downlink and utilizing that information:

Claims	Motorola Proposal	Siemens Proposal
1. … if so determining whether the channel assignment information is for assigning radio resources for the uplink shared channel or the downlink shared channel;	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. This is possible if the signalling payload is four bits

and the WTRU utilizing the radio resources for the uplink shared channel or the downlink shared channel.	can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.	or less. As shown in Fig. 1, the HS-SCCH part 1 provides 8 unused codewords within the channelisation code-set field (denoted as 'redundant area' in Fig. 1, [1]), which could be used for EU-DCH downlink signalling." Siemens Proposal at 1.

Claims	**Motorola Proposal**	**Siemens Proposal**
16. … determine whether the channel assignment information is for assigning radio resources for the uplink shared channel or the downlink shared channel, and utilizing the radio resources for the uplink shared channel or the downlink shared channel.	"One of the options for control channel design of EUDTC is to use the control channels for Rel-5 HS-DSCH to piggyback the control information required for EUDTC. This can be achieved by defining an additional frame format for HS-SCCH and HS-DPCCH." Motorola Proposal at 2.	"A further simplification of the UE implementation is possible if exactly the coding format of HS-SCCH part 1 is re-used. This is possible if the signalling payload is four bits or less. As shown in Fig. 1, the HS-SCCH part 1 provides 8 unused codewords within the channelisation code-set field (denoted as 'redundant area' in Fig. 1, [1]), which could be used for EU-DCH downlink signalling." Siemens Proposal at 1.

80. On information and belief, but for the applicant's deliberate decision to withhold the Motorola Proposal and the Siemens Proposal from the '151 Patent examiner, the PTO would not have allowed at least asserted claims 1 and 16 of the '151 Patent. The Motorola Proposal and the Siemens Proposal, by themselves or in combination with the admitted prior art, disclose each and every element of these claims—indeed, the Siemens Proposal teaches the specific method of distinguishing between uplink and downlink used in an embodiment of the '151 Patent, and describes that method using precisely the same figure.

81. On information and belief, the decision to withhold the Motorola Proposal and the Siemens Proposal was deliberate, and made with fraudulent intent. At least inventors Marian

Rudolf and Stephen Dick were specifically aware of the Motorola Proposal, as they attended the Working Group 1 meetings at which the Motorola Proposal was presented. At least inventor Marian Rudolf was specifically aware of the Siemens Proposal, as he attended the Working Group 1 meetings at which the Siemens Proposal was presented. In addition, 3GPP working group documents for any given meeting are distributed prior to the meeting to the appropriate working group or to those persons registered as regular participants—including other named inventors on the '151 Patent. Given that multiple inventors were actively involved with TSG-RAN Working Group 1 and regularly attended Working Group 1 meetings, they were clearly aware of the Siemens Proposal and the Motorola Proposal.

82. The inventors' awareness of the Motorola Proposal is also evident from the inclusion of a related Motorola submission in the cited prior art for the '151 Patent. In particular, the cited prior art for the '151 Patent includes a publication titled "3GPP TSG RANWG 1 Tdoc R1-02-1350, Motorola, 'Design Considerations for Enhanced Uplink Dedicated Channel,' Shanghai, China, Nov. 2002." '151 Patent at Page 2. The 1350 proposal cites the Motorola Proposal discussed above. *See* Exhibit O at 1, 5. But the 1350 proposal does not teach the shared control channel disclosed in the Motorola Proposal.

83. The inventors' awareness of the Siemens Proposal is also evident from the Provisional Application and the specification of the '151 Patent themselves, which (as already discussed) take the idea of using the "unused" values of the channelization code-set field and the figure used to illustrate that idea directly from the Siemens Proposal.

84. On information and belief, knowing that disclosing the Motorola Proposal and /or the Siemens Proposal would prohibit obtaining a patent, at least inventor Rudolf and inventor Dick made the conscious choice not to disclose the prior art to the PTO. The inventors disclosed

several working group documents to the Examiner from other meetings attended by the inventors and occurring around the same time as the Motorola Proposal and the Siemens Proposal—including the related Motorola 1350 proposal—but at least Marian Rudolf and Stephen Dick chose not to disclose the Motorola Proposal and the Siemens Proposal to the PTO.

85. For example, both Marian Ruldolf and Stephen Dick attended the Working Group 1 meeting in Shanghai, China, held November 2002, and disclosed the following working documents associated with this meeting to the PTO: (1) Tdoc R1-02-1277, Nokia, "Two Threshold Node B Packet Scheduling," Shanghai, China, Nov. 2002; (2) Tdoc R1-02-1350, Motorola, "Design Considerations for Enhanced Uplink Dedicated Channel," Shanghai, China, Nov. 2002; and (3) Tdoc R1-02-1277, Nokia, "Two Threshold Node B Packet Scheduling," Shanghai, China, Nov. 2002. *See* Exhibit C. However, Marian Rudolf and Stephen Dick attended the Working Group 1 meeting preceding the Shanghai meeting, held October 2002 in Espoo Finland, and chose not to disclose the highly relevant Motorola Proposal. And Marian Rudolf attended the Working Group 1 meeting following the Shanghai meeting, held January 2003 in San Diego, California, and chose not to disclose the highly relevant Siemens Proposal. *See* Exhibit D.

86. The deliberate choice by at least Marian Rudolf to use material taken from the Siemens Proposal in the first described embodiment of the '151 Patent, and the choice to disclose to the USPTO other Working Group materials while withholding the Siemens Proposal, demonstrate fraudulent intent. The deliberate choice of at least Marian Rudolf and Stephen Dick to disclose certain Working Group submissions, including the Motorola 1350 proposal, while withholding the directly relevant Motorola Proposal, demonstrates fraudulent intent. The pattern of withholding multiple prior art references that disclose the use of a single control channel and

the other requirements of at least claims 1 and 16 of the '151 Patent further demonstrates fraudulent intent. On information and belief, the inventors, including at least Marian Rudolf and Stephen Dick, withheld the Motorola Proposal and the Siemens Proposal with the intent of hiding from the PTO that the alleged inventions of at least claims 1 and 16 of the '151 Patent were not invented by the named inventors, but rather were taken from the prior work of others. As discussed above, but for the inventors' failure to disclose the Motorola Proposal and the Siemens Proposal, at least claims 1 and 16 of the '151 Patent would not have issued.

SEVENTH AFFIRMATIVE DEFENSE
(Prosecution Laches)

87. Complainants' claims are barred in whole or in part by delay in prosecuting the patent applications that matured into the Asserted Patents.

88. One or more of the Asserted Patents have a purported effective filing date of more than 10 years before the date Complainants requested this Investigation.

89. Complainants, based on their representations that one or more of the Asserted Patents claim benefit under 35 U.S.C. § 120 to a series of continuation applications, could have claimed the subject matter now recited in the asserted claims of one or more of the Asserted Patents at any time from the purported effective filing dates of one or more of the Asserted Patents. Complainants so unreasonably delayed filing the asserted claims that they are estopped from asserted them against Samsung. Not only is Complainants' unreasonable delay unexplained, but it also has prejudiced Samsung insofar as Samsung has invested in, worked on, and used the accused technology during the period of Complainants' unreasonable delay.

EIGHTH AFFIRMATIVE DEFENSE
(Lack of Unfair Act of Importation)

90. Samsung has not committed any unfair acts of importation.

NINTH AFFIRMATIVE DEFENSE
(Unenforceability)

91. InterDigital's claims are barred in whole or in part by reason of estoppel, unclean hands, waiver and/or other equitable doctrines based on InterDigital's failure to comply with its contractual obligations and promises made to various standards setting organizations ("SSOs"), to the industry as a whole, and to Samsung in particular that it would offer and grant licenses to each of its patents that are essential to the W-CDMA, UMTS, HSPA+, CDMA2000, 802.11, or LTE standards (the "Relevant Standards") on terms that are fair, reasonable, and non-discriminatory ("FRAND").

92. InterDigital made those representations through declarations, commitments, and assurances (collectively "assurances") to some or all of the SSOs responsible for adopting and promulgating the Relevant Standards, including the European Telecommunications Standards Institute ("ETSI"), the 3rd Generation Partnership Project ("3GPP"), the 3rd Generation Partnership Project ("3GPP2"), the International Telecommunications Union ("ITU"), the Institute of Electrical and Electronics Engineers ("IEEE"), and the Telecommunications Industry Association ("TIA"), to the members of those organizations, to manufacturers of products compliant with any of the Relevant Standards, and to Samsung.

93. Standards play a critical role in facilitating the development and interoperability of wireless and telecommunications technologies. For example, product designers and manufacturers are more willing to invest heavily in the development of products or component parts because, so long as their products are compliant with the standards, those products will interoperate effectively and be compatible with other products from third parties.

94. Most SSOs have adopted Intellectual Property Rights ("IPR") Policies to ensure that investment in standard-setting and standard-compliant equipment is not wasted as a result of

essential IPR being unavailable or only available under unreasonable and/or discriminatory licensing terms. These policies generally require that SSO members disclose their ownership of patents that may be essential to practice the standard and commit to licensing these patents on FRAND terms. SSO IPR Policies are designed to obtain FRAND licensing obligations from patent owners to ensure that they will not use their IPR to extract unreasonable license fees or to exclude any market participant that is willing to accept a license for use of the IPR on FRAND terms and conditions.

95. Both InterDigital and Samsung are or were members of the relevant SSOs including ETSI, ITU, 3GPP, 3GPP2, IEEE, and TIA. InterDigital participated in the standards setting procedures for the Relevant Standards.

96. ETSI, ITU, IEEE, and TIA are SSOs and are responsible for the standardization of information and communication technologies for the benefit of their members and third parties. 3GPP and 3GPP2 are collaborative activities through groups of recognized SSOs (their "Organizational Partners"), including ETSI (for 3GPP) and TIA (for 3GPP2). 3GPP and 3GPP2 develop technical specifications subsequently presented to and adopted as standards by their Organizational Partners.

97. These SSOs, like others, have developed IPR Policies designed to ensure that investment in standard-setting and standard-compliant equipment is not wasted as a result of essential IPR being unavailable or only available under unreasonable and/or discriminatory licensing terms. In addition, as a 3GPP and 3GPP2 "Individual Member," InterDigital was "bound by the IPR Policy" of the Organizational Partners through which InterDigital participated in 3GPP and 3GPP2.

98. ETSI's IPR Policy is set forth in Annex 6 of its Rules of Procedure. Clause 4.1 of the ETSI IPR Policy requires ETSI members to declare all essential IPR in a timely manner. Clause 15 of ETSI's IPR Policy defines IPR to mean "any intellectual property right conferred by statute law including applications therefor other than trademarks." Therefore, market participants have a reasonable expectation that all potentially essential patents or patent applications will be disclosed to ETSI. Clause 6 of ETSI's IPR Policy governs the availability of licenses to essential IPR, stating that when essential IPRs are brought to the attention of ETSI, ETSI shall immediately request an undertaking in writing that the IPR owner is prepared to grant irrevocable licenses on fair, reasonable, and non-discriminatory terms. Clause 8 of ETSI's IPR Policy states that, if an IPR owner refuses to give a FRAND commitment in accordance with Clause 6.1 of the IPR Policy prior to the publication of a standard, ETSI will select an alternative technology to incorporate into the standard, or will stop work entirely on the standard if no alternative is available. Further, if an IPR owner refuses to give a FRAND commitment in accordance with Clause 6.1 after publication of a standard, ETSI shall try to modify the standard so that the IPR in question is no longer essential or failing that will involve the European Commission to see what further action is required.

99. The ITU's IPR Policy is set forth in its "Common Patent Policy," which requires that "any party participating in the work of ITU" must disclose its potentially essential patents and state whether it is "willing to negotiate licenses with other parties on a non-discriminatory bases on reasonable terms and conditions," and, if it is not, then the standard at issue is not to include provisions dependent on those patents.

100. The IEEE's IPR Policy is set forth in Section 6.2 of the IEEE-SA Standards Board Bylaws. This section requires that the IEEE "request licensing assurance" through a Letter

of Assurance process. This Letter of Assurance must contain either (1) "[a] general disclaimer to the effect that the Submitter without conditions will not enforce any present or future Essential Patent Claims against any person … implementing … the standard," or (2) "[a] statement that a license for a compliant implementation of the standard will be made available to an unrestricted number of applicants on a worldwide basis without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination."

101. The IEEE's IPR Policy further states that "In order for IEEE's patent policy to function efficiently, individuals participating in the standards development process: (a) shall inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an existing Letter of Assurance, owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents; and (b) should inform the IEEE (or cause the IEEE to be informed) of any other holders of such potential Essential Patent Claims that are not already the subject of an existing Letter of Assurance."

102. TIA's IPR Policy requires that TIA request from any party that is identified as having potentially essential patents a "Patent Holder Statement" that indicates whether a "license under any Essential Patent(s) . . . will be made available to all applicants under terms and conditions that are reasonable and non-discriminatory." If a patent holder refuses to furnish such a statement the standard must be referred back for further consideration.

103. InterDigital has declared, including in public declarations to ETSI, that each of the Asserted Patents is potentially essential to one or more of the Relevant Standards. InterDigital has also stated, including in declarations to ETSI, IEEE, and ITU, that it will license its essential patents on FRAND terms. InterDigital has also previously licensed some of its

purportedly essential patents to Samsung, and, through its course of dealing with Samsung, has indicated it would offer and grant Samsung additional licenses to its essential patents on FRAND terms. On information and belief, InterDigital maintains that each of the Asserted Patents is in fact essential to one or more of the Relevant Standards. Thus, InterDigital has committed to the SSOs, their members, the implementers of their standards, and to Samsung that it will offer and grant licenses to each of the Asserted Patents on FRAND terms and conditions. In making these assurances, InterDigital intended to induce reliance—or reasonably should have expected reliance—by members of those organizations, by manufacturers and implementers of products compliant with any of the Relevant Standards, and by Samsung specifically.

104. Samsung relied on InterDigital's assurances by investing in the development, manufacture, and sale of products that practice the Relevant Standards with the belief that it would be able to obtain licenses to any InterDigital patents essential to those standards on FRAND terms and conditions.

105. InterDigital's assurances were false and misleading because InterDigital refuses to offer or grant Samsung a license to any of the patents it claims are essential to the Relevant Standards, including the Asserted Patents, on FRAND terms and conditions. In particular, InterDigital and Samsung were parties to a prior license agreement, executed in 2008 as part of a settlement of litigation that included ITC Investigation No. 337-TA-601. In that agreement, InterDigital granted Samsung rights to certain patents, including those that were declared essential to certain of the Relevant Standards. The 2008 agreement expired on December 31, 2012. InterDigital has refused to offer Samsung a renewal of that license on FRAND terms, and has refused to license on FRAND terms any of its patents essential to the Relevant Standards..

106. Samsung is willing to license, on FRAND terms, InterDigital's patents that have been declared essential to the Relevant Standards.

107. Samsung has suffered and will continue to suffer material prejudice based on InterDigital's refusal to license on FRAND terms any of its patents essential to the Relevant Standards, particularly if InterDigital obtains an order excluding Samsung's products that practice any Relevant Standard.

TENTH AFFIRMATIVE DEFENSE

(Patent Misuse)

108. Samsung incorporates the allegations set forth in paragraphs 91 through 107 above.

109. In light of these facts, InterDigital is barred from seeking to enforce any of the Asserted Patents against Samsung under the present circumstances by the doctrine of patent misuse.

ELEVENTH AFFIRMATIVE DEFENSE

(Lack of Standing)

110. Samsung incorporates the allegations set forth in paragraphs 91 through 107 above.

111. In light of its assurances to the SSOs and to Samsung and its failure to comply with those assurances in its dealings with Samsung, InterDigital lacks standing to bring its claims under the present circumstances.

TWELFTH AFFIRMATIVE DEFENSE

(Government Sales)

112. Samsung's importations for, and sales to, the United States government are outside the scope of this proceeding.

THIRTEENTH AFFIRMATIVE DEFENSE

(Relief Not in the Public Interest)

113. The exclusion order and other relief requested by Complainants are not in the public interest as they would adversely affect the public welfare, competitive conditions and the U.S. consumer and there are strong public policy reasons for denying InterDigital the relief sought.

FOURTEENTH AFFIRMATIVE DEFENSE

(Covenant Not to Sue, Express or Implied License and/or Patent Exhaustion)

114. InterDigital's claims are barred in whole or in part pursuant to a covenant not to sue, an express and/or implied license, and/or the doctrine of patent exhaustion. For example, on information and belief, InterDigital has patent license agreements with third party component manufacturers and suppliers that granted rights under the Asserted Patents. On information and belief, such licensed components are incorporated in Samsung's accused products. Samsung's accused products that incorporate such licensed components are thus expressly and/or impliedly licensed, and/or subject to a covenant not to sue under the Asserted Patents. Moreover, Samsung's purchase of such licensed components exhausts InterDigital's patent rights under the Asserted Patents, based on the doctrine of patent exhaustion.

CONCLUSION

WHEREFORE, the Samsung Respondents respectfully request that the International Trade Commission:

A. Find that no violation of Section 337 of the Tariff Act of 1930, as amended, exists by reason of any manufacture, importation, offer for sale, or sale by Samsung of any Wireless Devices with 3G and/or 4G Capabilities and Components Thereof as described in the Complaint and Notice;

B. Determine that Samsung has not imported, sold for importation, or sold within the United States after importation any Wireless Devices with 3G and/or 4G Capabilities and Components Thereof covered by a valid and enforceable asserted claims of the '966, '847, '970, '151, '830, '636, and '406 patents;

C. Declare that the asserted claims of the '966, '847, '970, '151, '830, '636, and '406 patents are invalid and unenforceable;

D. Declare that there is no domestic industry for the '966, '847, '970, '151, '830, '636, and '406 patents;

E. Dismiss the Complaint;

F. Deny Complainants' request for an exclusion order, cease and desist order, or any other relief requested as to Samsung or its products; and

G. Award Samsung such other relief as the Commission deems appropriate based on the facts determined by the authority of the Commission.

Respectfully submitted,

February 21, 2013

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CERTIFICATE OF SERVICE

I hereby certify that on February 21, 2013, copies of the foregoing RESPONSE OF RESPONDENTS SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., AND SAMSUNG TELECOMMUNICATIONS AMERICA, LLC TO THE COMPLAINT AND NOTICE OF INVESTIGATION were caused to be served upon the following, via delivery methods indicated:

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