

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

ZTE Corporation and ZTE (USA) Inc.

*Petitioners*

v.

InterDigital Technology Corporation

*Patent Owner*

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

Filed: February 23, 2007

Issued: May 10, 2011

Title: Method and System for Providing Channel Assignment Information  
Used to Support Uplink and Downlink Channels

---

**PETITION FOR *INTER PARTES* REVIEW  
OF U.S. PATENT NO. 7,941,151**

Case No.: IPR2014-00275

**TABLE OF CONTENTS**

I.	Introduction.....	1
II.	Mandatory Notices (37 C.F.R. § 42.8) .....	4
	A. Real Party-in-Interest (§ 42.8(b)(1)) .....	4
	B. Related Matters (§ 42.8(b)(2)) .....	4
	C. Counsel and Service Information (§§ 42.8(b)(3)-(4)).....	4
III.	Payment of Fees (§ 42.15(a)) .....	5
IV.	Requirements for <i>Inter Partes</i> Review .....	5
	A. Grounds for Standing (§ 42.104(a)) .....	5
	B. Identification of Challenged Claims (§ 42.104(b)(1)) .....	5
	C. Prior Art and Specific Grounds for Challenging Claims (§ 42.104(b)(2)) .....	5
	D. Claim Construction (§ 42.104(b)(3)) .....	6
	1. “same physical downlink control channel” .....	7
	2. “channel assignment information” .....	8
	3. “shared channel” .....	9
	4. “based on WTRU identity (ID)-masked cyclic redundancy check (CRC) parity bits” .....	9
V.	Overview of the Technology .....	11
	A. Prior Art.....	11
	B. Alleged Invention.....	13
VI.	There is a reasonable likelihood that at least one claim of the 151 patent is unpatentable.....	15
	A. Ground 1: Under 35 U.S.C. § 102, Siemens 004 anticipates the challenged claims. Alternatively, under 35 U.S.C. § 103, Siemens 004 renders claims 1-6, 8-9, 16-21, and 23-24 obvious.....	15
	1. Siemens 004 anticipates all of the challenged claims because its disclosure is identical in substance to the 151 patent’s first embodiment, which the challenged claims cover. ....	16
	2. Siemens 004 discloses each and every limitation of claim 1. ...	18
	3. Siemens 004 discloses each and every limitation of claims 2-6 .....	27
	4. Siemens 004 discloses each and every limitation of claim 8. ...	29

5.	Siemens 004 discloses each and every limitation of claim 9. ...	31
6.	Siemens 004 discloses each and every limitation of claim 16. ...	32
7.	Siemens 004 discloses each and every limitation of claims 17-21 and 23-24.....	33
B.	Ground 2: Under 35 U.S.C. § 103, the combination of Siemens 004 and the admitted prior art renders claims 1-6 and 16-21 obvious.....	33
1.	The 151 patent admits that “WTRU identity (ID)-masked cyclic redundancy check (CRC) parity bits” (claims 1 and 16) and “WTRU ID-masked CRC parity bits are derived from a sixteen bit CRC” (claims 2 and 17) were known in the prior art.....	33
2.	The 151 patent admits that the limitations in claims 3-6 and 18-21 were known in the prior art.....	34
C.	Ground 3: Under 35 U.S.C. § 103, the combination of Siemens 004 and 3GPP TS 25.212 renders claims 1-6 and 16-21 obvious. ....	35
1.	3GPP TS 25.212 discloses the “first determining” limitation (claim 1) .....	36
2.	3GPP TS 25.212 discloses the limitations of claims 2-6 and 17-21.....	37
3.	A person of ordinary skill in the art would have been motivated to combine the teachings of Siemens 004 and 3GPP TS 25.212. ....	38
D.	Ground 4: Under 35 U.S.C. § 103, the combination of Siemens 004 and InterDigital 810 renders claims 1-2 and 16-17 obvious.....	39
1.	InterDigital 810 discloses the “first determining” limitation (claim 1). ....	41
2.	InterDigital 810 discloses the limitations of claims 2 and 17... ..	42
3.	A person of ordinary skill in the art would have been motivated to combine the teachings of Siemens 004 and InterDigital 810. ....	43
E.	Ground 5: Under 35 U.S.C. § 103, the combination of Siemens 004 and Motorola 683 renders claims 8 and 23 obvious. ....	44
1.	Motorola 683 discloses the limitations of claims 8 and 23. ....	45
2.	A person of ordinary skill in the art would have been motivated to combine the teachings of Siemens 004 and Motorola 683... ..	47
F.	Ground 6: Under 35 U.S.C. § 103, the combination of Siemens 004 and Siemens 010 renders claims 8 and 23 obvious.....	48
1.	Siemens 010 discloses the limitations of claims 8 and 23.....	49

2. A person of ordinary skill in the art would have been motivated to combine the teachings of Siemens 004 and Siemens 010. ....50

VII. Claim Charts .....	51
A. Siemens 004 .....	51
B. 3GPP TS 25.212 .....	55
C. InterDigital 810 .....	58
D. Motorola 683 .....	59
E. Siemens 010 .....	59
VIII. Conclusion .....	60

**TABLE OF EXHIBITS**

<b>Exhibit</b>	<b>Description</b>
1001	U.S. Patent No. 7,941,151 B2 <b>("151 patent")</b>
1002	Declaration of Dr. Vijay K. Madiseti in Support of the Petition for Inter Partes Review of U.S. Patent No. 7,941,151 <b>("V.M. Decl.")</b>
1003	Siemens, "Downlink Control Channel Configuration for Enhanced Uplink Dedicated Transport Channel," Tdoc R1-030004, TSG-RAN Working Group 1 #30 (January 7-10, 2003) <b>("Siemens 004")</b>
1004	Third Generation Partnership Project, "Technical Specification Group Radio Access Network; Multiplexing and channel coding (FDD) (Release 5)," 3GPP TS 25.212 V5.2.0 (Sep. 2002) <b>("3GPP TS 25.212")</b>
1005	InterDigital, "Implicit UE Identification for HSDPA Downlink Signaling," R1-01-0810, TSG-RAN Working Group 1 #22, Torino, Italy, (Aug. 27-31, 2001) <b>("InterDigital 810")</b>
1006	Motorola, "Mechanisms for managing uplink interference and bandwidth," Tdoc SMG2 UMTS-L1 683/98, ETSI SMG2 UMTS L1 Expert Group, Espoo, Finland (Dec. 14-18, 1998) <b>("Motorola 683")</b>
1007	Siemens, "Signalling Requirements for HSDPA in TDD Mode," 12A010010, 3GPP TSG RAN WG1/2 Joint Meeting on HSDPA, Sophia Antipolis, France (Apr. 5-6, 2001). <b>("Siemens 010")</b>
1008	October 8, 2013 Amended Joint Claim Construction Chart, <i>InterDigital Comm's., Inc. v. ZTE Corp.</i> , C.A. No. 1:13-cv-00009-RGA (D. Del.) <b>("8-8-13 Amended Joint Cl. Const. Chart")</b>
1009	Joint Claim Construction Brief, <i>InterDigital Comm's., Inc. v. ZTE Corp.</i> , C.A. No. 1:13-cv-00009-RGA (D. Del.) <b>("Cl. Const. Br.")</b>
1010	U.S. Provisional Patent Application No. 60/523,049 <b>("049 provisional")</b>
1011	Meeting minutes from Meeting #30 of 3GPP TSG RAN Working Group 1 <b>("Minutes from WG1 Meeting #30")</b>
1012	January 2, 2003 e-mail from Michel Juergen to the e-mail reflector for Working Group 1 <b>("1/2/03 Juergen e-mail")</b>
1013	Prosecution History of U.S. Patent Application No. 10/902,740, February 27, 2006 Response to Office Action <b>("740 App., 2/27/06 Response")</b>

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.