

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.,

Petitioner,

v.

BELL NORTHERN RESEARCH, LLC,

Patent Owner.

Patent No. 7,039,435

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 7,039,435**

TABLE OF CONTENTS

I. INTRODUCTION 1

II. MANDATORY NOTICES UNDER 37 C.F.R § 42.8(a)(1)..... 1

 A. Real Party-In-Interest Under 37 C.F.R. § 42.8(b)(1) 1

 B. Related Matters Under 37 C.F.R. § 42.8(b)(2) 1

 C. Lead And Back-Up Counsel And Service Information 2

III. REQUIREMENTS FOR IPR UNDER 37 C.F.R. § 42.104..... 3

 A. Grounds for Standing Under 37 C.F.R. § 42.104(a) 3

 B. Challenge Under 37 C.F.R. § 42.104(b) and Relief Requested 3

IV. SUMMARY OF THE '435 PATENT 6

 A. Brief Description 6

 B. Summary of the Prosecution History 6

 C. Level of Ordinary Skill..... 7

V. Claim Construction Under 37 C.F.R. §§ 42.104(b)(3)..... 8

 1. “position to a communications tower” (claim 1) 8

VI. GROUND 1: CLAIMS 1, 2, AND 3 ARE ANTICIPATED BY BAIKER 11

 A. Overview of Baiker 11

 B. Application to Challenged Claims 13

VII. GROUND 2: CLAIMS 1, 2, 3, AND 6 ARE OBVIOUS IN VIEW OF BAIKER AND WERLING 25

 A. Predictable Combination of Baiker and Werling 25

 B. Application to Challenged Claims 28

VIII. GROUND 3: CLAIMS 1, 2, AND 3 ARE ANTICIPATED BY IRVIN..... 35

 A. Overview of Irvin 35

 B. Application to Challenged Claims 37

IX. GROUND 4: CLAIMS 1, 2, 3, AND 6 ARE OBVIOUS IN VIEW OF IRVIN AND MYLLYMÄKI..... 48

 A. Predictable Combination of Irvin and Myllymäki 48

 B. Application to Challenged Claims 50

X. GROUND 5: CLAIMS 1, 2, AND 3 ARE OBVIOUS IN VIEW OF BODIN AND IRVIN 57

 A. Predictable Combination of Bodin and Irvin 57

 B. Application to Challenged Claims 59

XI. GROUND 6: CLAIM 6 IS OBVIOUS IN VIEW OF BODIN, IRVIN, AND MYLLYMÄKI 67

A. Predictable Combination of Bodin, Irvin, and Myllymäki 67
B. Application to Challenged Claims 67
XII. CONCLUSION..... 69

EXHIBIT LIST

Exhibit	Description
1001	U.S. Pat. No. 7,039,435 to McDowell et al. (“the ’435 patent”)
1002	File History of the ’435 Patent
1003 ¹	Declaration of Dr. Jonathan Wells
1004	Certified English Translation of European Patent Publication EP 1091498 by Baiker (“Baiker”)
1005	U.S. Patent No. 6,456,856 to Werling (“Werling”)
1006	PCT Patent Publication WO 2002/05443 by Irvin (“Irvin”)
1007	U.S. Patent No. 6,018,646 to Myllymäki (“Myllymäki”)
1008	U.S. Pat. No. 5,390,338 to Bodin (“Bodin”)
1009	Joint Claim Construction Chart, Worksheet, and Hearing Statement in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1010	U.S. Provisional Patent Application No. 09/612,034 by Irvin (“Irvin Provisional”)
1011	Michael Barr, <i>Programming Embedded Systems in C and C++</i> (O’Reilly & Associates, 1999)
1012	Rudolf F. Graf, <i>Modern Dictionary of Electronics</i> (Butterworth-Heinemann, 1999)
1013	Harry Newton, <i>Newton’s Telecom Dictionary</i> (Miller Freeman, Inc., 1999)
1014	Webster’s II New College Dictionary (Houghton Mifflin Co, 1999)
1015	Martin H. Weik, <i>Fiber Optics Standard Dictionary</i> (Chapman & Hall, 1997)
1016	European Patent Publication EP 1091498 (“Baiker”)
1017	Webster’s New World College Dictionary (Simon & Schuster, 1997)
1018	U.S. Patent No. 6,029,074 to Irvin (“Irvin ’074”)

¹ Exhibit 1003 is a verbatim copy of the Declaration of Jonathan Wells submitted in IPR2019-01365.

Exhibit	Description
1019	Defendants' Joint Opening Claim Construction Brief in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1020	Plaintiff's Opening Claim Construction Brief in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1021	Supplemental Joint Claim Construction Hearing Statement Pursuant to P.L.R. 4.2 in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1022	Defendants' Joint Responsive Claim Construction Brief in <i>Bell Northern Research, LLC v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1023	Plaintiff's Responsive Claim Construction Brief in <i>Bell Northern Research, LLC v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1024	Redline Comparison of this Petition and Petition filed in IPR2019-01365 ("ZTE IPR")
1025 ²	Claim Construction Order and Order on Motions for Summary Judgment in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1026	Transcript of June 20, 2019 Hearing in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1027	Order on Request for Pre-Institution Stay of the Litigation (August 12, 2019) in <i>Bell Northern Research, LLC, v. ZTE Corporation, ZTE (USA) Inc., and ZTE (TX), Inc.</i> (Case No. 3:18-cv-1786) (S.D. Cal.)
1028	Order on Confirming Settlement and Setting Deadline to File Joint Motion for Dismissal (October 24, 2019) in <i>Bell Northern Research, LLC, v. Bell Northern Research, LLC, v. Huawei Technologies Co., Ltd. et al.</i> (Case No. 3:18-cv-1784) (S.D. Cal.)
1029	Claim Construction Order in <i>Bell Northern Research, LLC, v. LG Electronics, Inc. et al.</i> , (Case No. 3:18-cv-02864) (S.D. Cal.)

² Exhibits 1025-1028 were submitted in IPR2019-01365 after the petition was filed.

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.