UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ERICSSON INC. AND
TELEFONAKTIEBOLAGET LM ERICSSON
Petitioner

V.

INTELLECTUAL VENTURES I LLC AND INTELLECTUAL VENTURES II LLC Patent Owner

CASE IPR: Unassigned

PETITION FOR INTER PARTES REVIEW OF

U.S. PATENT NO. 5,602,831

Claims 1-17

UNDER 35 U.S.C. §§ 311-319 and 37 C.F.R. §§ 42.1-.80, 42.100-.123



TABLE OF CONTENTS

			Page
EXH	IBIT L	JST	iv
I.	RULE 42.8 MANDATORY NOTICES		
	A. B. C.	Real Party-In-Interest (37 C.F.R. § 42.8(b)(1)):	
	D. E.	§ 42.8(b)(3)):	2
II.	STATEMENT OF THE PRECISE RELIEF REQUESTED AND THE REASONS THEREFOR		
III.	OVERVIEW OF THE '831 PATENT		
	A. B.	Summary of the Technology and Claimed Subject Matter Prosecution History of the '831 Patent	
IV.	SUMMARY OF THE ASSERTED GROUNDS FOR INVALIDITY UNDER 35 U.S.C. §§ 102 and 103		
V.	A PERSON OF ORDINARY SKILL IN THE ART		
VI.	CLAIM CONSTRUCTION		
VII.	IDENTIFICATION OF CHALLENGE (37 C.F.R. § 42.104(B))		
	A.	Ground 1: The '829 Patent Anticipates Claims 1, 2, 6, 9-15, and 17 Under 35 U.S.C. § 102	11
	В.	Ground 2: Claims 1-17 Are Obvious Over The '829 Patent And The '549 Patent Under 35 U.S.C. § 103	
	C.	Ground 3: The '319 Patent Renders Claims 1-17 Obvious Under 35 U.S.C. § 103(a)	34
	D.	Ground 4: Claims 1-17 Are Obvious Over The '319 Patent And The '549 Patent Under 35 U.S.C. § 103	l
	E.	Ground 5: Claims 1-17 Are Obvious Over The '319 Patent, the '549 Patent, Bergman, And The '667 Patent Under 35 U.S.C. § 103	
VIII	CONCLUSION		58



EXHIBIT LIST

Exhibit Number	Exhibit Name
1001	United States Patent No. 5,602,831 (the "'831 Patent")
1002	U.S. Patent Application No. 08/414,746 (the "'746 Application")
1003	Declaration of Professor Wayne Stark, Ph.D. ("Stark Dec.")
1004	The '831 Patent– File History
1005	United States Patent No. 4,720,829 (the "'829 Patent")
1006	United States Patent No. 4,901,319 (the "'319 Patent")
1007	Bergman, M.L., and Farrell, P.G., "A Comparison of Block Code Performance for Radio Mobile Radio Channels: Trade-Offs Between Block Length, Interleaving Depth and Type," University Research in Mobile Radio, IEE Colloquium on, November 2, 1990, pp. 1/1-8/6, IET (Nov. 2, 1990) ("Bergman")
1008	Castro, J.P., "Channel modeling and data transmission in mobile satellite systems," Personal, Indoor and Mobile Radio Communications, 1992. Proceedings, PIMRC '92., Third IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, vol., no., pp. 387, 392, 19-21 Oct 1992 ("Castro")
1009	Ericsson's Motion to Intervene filed April 29, 2014, in the following litigations: <i>Intellectual Ventures I LLC et al. v. AT & T Mobility LLC et al.</i> , Civil Action No. 1:13-cv-01668-LPS (D. Del.); <i>Intellectual Ventures I LLC et al. v. Leap Wireless International Inc. et al.</i> , Civil Action No. 1:13-cv-01669-LPS (D. Del.); <i>Intellectual Ventures I LLC et al. v. Nextel Operations Inc. et al.</i> , Civil Action No. 1:13-cv-01670-LPS (D. Del.); <i>Intellectual Ventures I LLC et al. v. T-Mobile USA Inc. et al.</i> , Civil Action No. 1:13-cv-01671-LPS (D. Del.); and <i>Intellectual Ventures I LLC et al. v. United States Cellular Corp.</i> , Civil Action No. 1:13-cv-



Exhibit Number	Exhibit Name
	01672-LPS (D. Del.)
1010	Complaint filed October 7, 2013, in <i>Intellectual Ventures I LLC et al. v. Leap Wireless International Inc. et al.</i> , Civil Action No. 1:13-cv-01669-LPS (D. Del.)
1011	EP Search Report for EP (counterpart) Application No. 96909621.3 ("EP Search Report")
1012	United States Patent No. 4,945,549 (the "'549 Patent")
1013	United States Patent No. 5,239,667 (the "'667 Patent")
1014	Steele, R., "Mobile Radio Communications," pp. 348-355, Pantech Press Ltd., London (1992) ("Steele")
1015	"Digital cellular communications system (Phase 2+); Channel coding (GSM 05.03 version 3.6.1)," European Telecommunications Standards Institute, October 1994 ("GSM 05.03")
1016	"EIA/TIA Interim Standard, Cellular System Dual-Mode Mobile Station – Base Station Compatibility Standard," IS- 54-B, Telecommunication Industry Association, April 1992 ("IS-54-B")
1017	TIA-EIA IS-95A Interim Standard: Mobile Station-Base Station Compatibility Standard for Dual-Mode Wideband Spread Spectrum Cellular System ("IS-95A")



I. RULE 42.8 MANDATORY NOTICES

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

The real parties-in-interest are Ericsson Inc. and Telefonaktiebolaget LM Ericsson (together "Petitioner").

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

The '831 Patent is being asserted in co-pending district court litigations captioned as:

Title	Docket Number
Intellectual Ventures I LLC et al. v. AT & T Mobility LLC et al.	1:13-cv-01668-LPS (D. Del.)
Intellectual Ventures I LLC et al. v. Leap Wireless International Inc. et al.	1:13-cv-01669-LPS (D. Del.)
Intellectual Ventures I LLC et al. v. Nextel Operations Inc. et al.	1:13-cv-01670-LPS (D. Del.)
Intellectual Ventures I LLC et al. v. T- Mobile USA Inc. et al.	1:13-cv-01671-LPS (D. Del.)
Intellectual Ventures I LLC et al. v. United States Cellular Corp.	1:13-cv-01672-LPS (D. Del.)

On April 29, 2014, the Petitioner filed a motion to intervene in the abovenoted litigations. *See* Ex. 1009.

C. Designation of Lead and Back-Up Counsel (37 C.F.R. § 42.8(b)(3)):

Lead counsel is Steven G. Spears (Reg. No. 43,926), and back-up counsel is G. Matthew McCloskey (Reg. No. 47,025).



DOCKET

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.

