

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Cisco Systems, Inc.,
Petitioner

vs.

TQ Delta, LLC

PETITION FOR INTER PARTES REVIEW

OF

U.S. PATENT NO. 8,238,412

TABLE OF CONTENTS

PETITIONER’S EXHIBIT LIST iv

I. MANDATORY NOTICES 1

 A. Real Party-in-Interest..... 1

 B. Related Matters..... 1

 C. Lead and Back-up Counsel and Service Information 2

II. GROUNDS FOR STANDING..... 2

III. REQUESTED RELIEF 3

IV. REASONS FOR THE REQUESTED RELIEF 3

 A. Summary of the ’412 Patent..... 3

 B. Prosecution History 5

 C. Priority Date 5

 D. Summary of the Petition..... 6

 E. Note Regarding Page Citations 6

V. IDENTIFICATION OF CHALLENGES AND CLAIM CONSTRUCTION 7

 A. Challenged Claims..... 7

 B. Statutory Grounds for Challenges 7

 C. Level of Ordinary Skill in the Art 8

 D. Claim Construction..... 8

VI. IDENTIFICATION OF HOW THE CONSTRUED CLAIMS ARE UNPATENTABLE..... 10

A.	Summary of the Prior Art.....	10
1.	Summary of Milbrandt.....	10
2.	Summary of Hwang	11
3.	Summary of ANSI T1.413	11
B.	Reasons to Combine.....	12
1.	Reasons to Combine Milbrandt with Hwang.....	12
2.	Reasons to Combine Milbrandt/Hwang with ANSI T1.413.....	14
C.	Challenge #1: Claims 1-8, 13, 14, 19, and 20 are rendered obvious under 35 U.S.C. § 103 by Milbrandt in view of Hwang and ANSI T1.413.....	18
1.	Claim 1	18
2.	Claim 3	28
3.	Claim 5	33
4.	Claim 7	35
5.	Claim 13	37
6.	Claim 14	46
7.	Claim 19	49
8.	Claim 20	51
9.	Claims 2, 4, 6, and 8.....	53
VII.	CONCLUSION.....	55
VIII.	CERTIFICATE OF WORD COUNT.....	57

PETITIONER'S EXHIBIT LIST

May 6, 2016

- 1001 U.S. Patent No. 8,238,412 to Krinsky et al.
- 1002 Prosecution File History of U.S. 8,432,956
- 1003 Prosecution File History of U.S. 8,238,412
- 1004 Prosecution File History of U.S. 7,835,430
- 1005 Prosecution File History of U.S. 7,570,686
- 1006 Prosecution File History of U.S. 6,658,052
- 1007 U.S. Provisional Application No. 60/224,308
- 1008 U.S. Provisional Application No. 60/174,865
- 1009 Declaration of Dr. Sayfe Kiaei Under 37 C.F.R. § 1.68
- 1010 Curriculum Vitae of Dr. Sayfe Kiaei
- 1011 U.S. Patent No. 6,636,603 to Milbrandt
- 1012 U.S. Patent No. 6,891,803 to Chang et al.
- 1013 U.S. Patent No. 6,590,893 to Hwang et al.
- 1014 ANSI T1.413-1995 Standard
- 1015 Charles K. Summers, ADSL STANDARDS, IMPLEMENTATION, AND ARCHITECTURE (CRC Press 1999) (selected pages)
- 1016 Walter Goralski, ADSL AND DSL TECHNOLOGIES (McGraw-Hill 1998) (selected pages)
- 1017 Harry Newton, Newton's Telecom Dictionary, 16th Ed. (2000) (selected pages)

- 1018 Valerie Illingworth and John Daintith, THE FACTS ON FILE
DICTIONARY OF COMPUTER SCIENCE (Market House Books 2001)
(selected pages)
- 1019 Thomas Starr, John M. Cioffi, Peter J. Silverman, Understanding
Digital Subscriber Line Technology, (Prentice Hall 1999) (selected
pages)
- 1020 Andrew S. Tanenbaum, COMPUTER NETWORKS (Prentice Hall 1996)
(selected pages)
- 1021 B. P. Lathi, Modern Digital and Analog Communication Systems
(Oxford University Press 1998) (selected pages)
- 1022 Behzad Razavi, RF MICROELECTRONICS (Prentice Hall 1997) (selected
pages)
- 1023 Declaration of David Bader

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.