#### UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Oracle Corporation,

Petitioner,

v.

Crossroads Systems, Inc.

Patent Owner.

IPR2015-\_\_\_\_

U.S. Patent No. 7,051,147

PETITION FOR INTER PARTES REVIEW

Find authenticated court documents without watermarks at docketalarm.com.

## TABLE OF CONTENTS

EXHIBIT LISTiv		
I. N	ANDATORY NOTICES1	
А.	Real Party-In-Interest1	
В.	Related Matters1	
С.	Lead and Back-Up Counsel1	
D.	Service Information1	
II. F	PAYMENT OF FEES2	
III. F	REQUIREMENTS FOR INTER PARTES REVIEW	
А.	Grounds for Standing2	
В.	Identification of Challenge	
1.	The Specific Art and Statutory Ground(s) on Which the Challenge Is Based.3	
2.	How the Construed Claims Are Unpatentable Under the Statutory Grounds Identified in 37 C.F.R. § 42.204(b)(2) and Supporting Evidence Relied upon to Support the Challenge	
IV. F	BROADEST REASONABLE CONSTRUCTION	
А.	Claims 1-13 Are Rendered Obvious by CRD-5500 User's Manual Taken in Combination with CRD-5500 Data Sheet and Smith	
1.	Introduction of the CRD-5500 References	
2.	Introduction of the Smith Reference9	
3.	Level of Skill in the Art10	
4.	The Combined System of CRD-5500 User Manual, CRD-5500 Data Sheet and Smith	
5.	Correspondence Between Claims 1-14 and the CRD-5500 User Manual, CRD-5500 Data Sheet and Smith	
6.	Secondary Indicia of Nonobviousness	
В.	Claims 3, 6-9 and 12 Are Rendered Obvious by Kikuchi Taken in Combination with Bergsten	
1.	Introduction of the Kikuchi Reference	
2.	Introduction of the Bergsten Reference	
3.	The Combined System of Kikuchi and Bergsten	
4.	Correspondence Between Claims 3, 6-9 and 12 and Kikuchi and Bergsten33	

С.	Claims 3, 6-9 and 12 Are Rendered Obvious by Bergsten Taken in	
	Combination with Hirai	43
1	. Introduction of the Hirai Reference	43
2	2. The Combined System of <i>Bergsten</i> and <i>Hirai</i>	45
3	6. Correspondence Between Claims 3, 6-9 and 12 and Bergsten and Hirai	48
V.	EXPLANATION OF NON-REDUNDANCY	57
VI. E	EARLIER PROCEEDINGS AND 35 U.S.C. §325(D)	59
VII.	CONCLUSION	60

#### EXHIBIT LIST

1001	U.S. Patent No. 7,051,147 ("the '147 Patent")
1002	Select Portions of File History of the '147 Patent
1003	CRD-5500 SCSI RAID Controller User's Manual ("CRD-5500 User Manual")
1004	CRD-5500 SCSI RAID Controller Data Sheet ("CRD-5500 Data Sheet")
1005	Smith et al., Tachyon: A Gigabit Fibre Channel Protocol Chip, Hewlett- Packard Journal, October 1996 ("Smith")
1006	U.S. Patent No. 6,219,771 to Kikuchi et al. ("Kikuchi")
1007	U.S. Patent No. 6,073,209 to Bergsten ("Bergsten")
1008	JP Patent Application Publication No. Hei 5[1993]-181609 to Hirai ("Hirai")
1009	Infringement contentions in Crossroads Systems, Inc. v. Oracle Corporation, W.D. Tex. Case No. 1-13-cv-00895, Crossroads Systems, Inc. v. Huawei Technologies Co. Ltd. et al., W.D. Tex. Case No. 1-13-cv-01025, and Crossroads Systems, Inc. v. NetApp, Inc., W.D. Tex. Case No. 1-14-cv-00149
1010	Declaration of Professor Chase, Professor of Computer Science at Duke University
1011	Cheating the I/O Bottleneck: Network Storage with Trapeze/Myrinet
1012	Interposed Request Routing for Scalable Network Storage
1013	Cut-Through Delivery in Trapeze: An Exercise in Low-Latency Messaging
1014	Structure and Performance of the Direct Access File System
1015	Implementing Cooperative Prefetching and Caching in a Globally- Managed Memory System

1016	Network I/O with Trapeze
1017	A Cost-Effective, High-Bandwidth Storage Architecture
1018	RAID-II: A High-Bandwidth Network File Server
1019	Payload Caching: High-Speed Data Forwarding for Network Intermediaries
1020	Petal: Distributed Virtual Disks
1021	File Server Scaling with Network-Attached Secure Disks
1022	Failure-Atomic File Access in an Interposed Network Storage System
1023	U.S. Patent No. 6,308,228 to Yocum et al. ("Yocum")
1024	Select Portions of File History of Reexamination Control No. 90/007,123 (U.S. Patent No. 5,941,972)
1025	Select Portions of the File History of Reexamination Control No. 90/007,124 (U.S. Patent No. 6,421,753)
1026	Plaintiff Crossroads Systems, Inc.'s Objections and Responses to Defendants' First Set of Common Interrogatories in <i>Crossroads Systems,</i> <i>Inc. v. Oracle Corporation</i> , W.D. Tex. Case No. 1-13-cv-00895, <i>Crossroads</i> <i>Systems, Inc. v. Huawei Technologies Co. Ltd. et al.</i> , W.D. Tex. Case No. 1-13- cv-01025, and <i>Crossroads Systems, Inc. v. NetApp, Inc.</i> , W.D. Tex. Case No. 1-14-cv-00149
1027	Storagepath Fibre Channel Drive System, SWS/Storagepath, available at web.archive.org/web/19970114010450/http://www.storagepath.com/fibre.htm, archived January 14, 1997
1028	Technology Brief Strategic Direction for Compaq Fibre Channel-Attached Storage, Compaq Computer Corporation, October 14, 1997
1029	<i>Tantany (ed.), Fibre Channel (Ch. 5) of High Performance Networks</i> , Kluwer Academic Publishers, 1994

v

# DOCKET A L A R M



# 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.