

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Oracle Corporation,

NetApp Inc. and

Huawei Technologies Co., Ltd.,

Petitioners,

v.

Crossroads Systems, Inc.

Patent Owner.

IPR2014-_____

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

PETITION FOR *INTER PARTES* REVIEW

<p>CROSSROADS EXHIBIT 2130 Oracle Corp. v. Crossroads Systems, Inc. IPR2015-0</p>
--

TABLE OF CONTENTS

EXHIBIT LIST	iv
I. INTRODUCTION	1
II. MANDATORY NOTICES	2
A. Real Party-In-Interest	2
B. Related Matters	2
C. Lead and Back-Up Counsel	3
D. Service Information	3
III. PAYMENT OF FEES	3
IV. REQUIREMENTS FOR INTER PARTES REVIEW	4
A. Grounds for Standing	4
B. Identification of Challenge	4
1. The Specific Art and Statutory Ground(s) on Which the Challenge Is Based	4
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	5
V. THE ‘147 PATENT	6
A. The Preferred Embodiment of the ‘147 Patent	6
B. Reexamination of the Ancestor of the ‘147 Patent	7
VI. BROADEST REASONABLE CONSTRUCTION	9
VII. GROUNDS OF UNPATENTABILITY	11
A. Claims 14-39 Are Rendered Obvious by CRD-5500 User Manual Taken in Combination with CRD-5500 Data Sheet and Smith	12
1. Introduction of the CRD-5500 References	12
2. Introduction of the Smith Reference	15
3. The Combined System of CRD-5500 User Manual, CRD-5500 Data Sheet and Smith	16
4. Correspondence between Claims 14-39 and the Combined System of CRD-5500 and Smith	19
B. Claims 14-39 Are Rendered Obvious by Kikuchi Taken in Combination with Bergsten	27

1.	Introduction of the Kikuchi Reference.....	27
2.	Introduction of the Bergsten Reference	28
3.	The Combined System of Kikuchi and Bergsten.....	30
4.	Correspondence between Claims 14-39 and the Combined System of Kikuchi and Bergsten.....	33
C.	Claims 14-39 Are Rendered Obvious by Bergsten Taken in Combination with Hirai.....	42
1.	Introduction of the Hirai Reference	42
2.	The Combined System of Bergsten and Hirai	44
3.	Correspondence between Claims 14-39 and the Combined System of Bergsten and Hirai	47
VIII.	EXPLANATION OF NON-REDUNDANCY	55
IX.	CONCLUSION	57

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 *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
- 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

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.