

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT3660328

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CROSSROADS SYSTEMS, INC.	07/22/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	KIP CR P1 LP
<b>Street Address:</b>	1345 AVENUE OF THE AMERICAS
<b>Internal Address:</b>	46TH FLOOR
<b>City:</b>	NEW YORK
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10105
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14964942
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
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<b>ATTORNEY DOCKET NUMBER:</b>	CROSS2240-2
<b>NAME OF SUBMITTER:</b>	ARI AKMAL
<b>SIGNATURE:</b>	/ARI AKMAL/
<b>DATE SIGNED:</b>	12/16/2015
<b>Total Attachments: 16</b>	
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## ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Crossroads Systems, Inc., a Delaware corporation, with a business address located at 11000 North Mo-Pac Expressway, Austin, TX 78759 ("Assignor"), effective as of July 29, 2013 (the "Effective Date"), Assignor, does hereby sell, assign, transfer, and convey unto KIP CR P1 LP ("Assignee"), all of Assignor's right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively, the "Patent Rights"):

(a) all of the patent applications and patents of Assignor, including, without limitation, the patent applications and patents listed in the table below, but excluding the '972 Patents (as defined in that certain Credit Agreement between Assignor and Assignee dated as of the date hereof) (the "Patents");

Patent or application no.	Country	Filing Date (mm-dd-yyyy)	Title of Patent and First Named Inventor
6,041,381	US	02-05-1998	FIBRE CHANNEL TO SCSI ADDRESSING METHOD AND SYSTEM Geoffrey B. Hoese
6,138,161	US	02-18-1999	METHOD AND SYSTEM FOR MAINTAINING RESERVE COMMAND RELATIONSHIPS IN A FIBRE CHANNEL NETWORK Robert A. Reynolds
6,148,421	US	05-29-1998	ERROR DETECTION AND RECOVERY FOR SEQUENTIAL ACCESS DEVICES IN A FIBRE CHANNEL PROTOCOL Geoffrey B. Hoese
6,151,331	US	09-23-1998	SYSTEM AND METHOD FOR PROVIDING A PROXY FARP FOR LEGACY STORAGE DEVICES Stephen K. Wilson
6,199,112	US	09-23-1998	SYSTEM AND METHOD FOR RESOLVING FIBRE CHANNEL DEVICE ADDRESSES ON A NETWORK USING THE DEVICE'S FULLY QUALIFIED DOMAIN NAME Stephen K. Wilson
6,205,141	US	06-30-1999	METHOD AND SYSTEM FOR UN-TAGGED COMMAND QUEUING Keith M. Arroyo
6,314,488	US	05-12-1998	SYSTEM FOR SEGMENTING A FIBRE CHANNEL ARBITRATED LOOP TO A PLURALITY OF LOGICAL SUB-LOOPS USING SEGEMENTATION ROUTER AS A MASTER TO CAUSE THE SEGMENTATION OF PHYSICAL ADDRESSES Brian R. Smith
6,341,315	US	02-26-1999	STREAMING METHOD AND SYSTEM FOR FIBRE CHANNEL NETWORK DEVICES Keith M. Arroyo
6,392,570	US	09-14-2000	METHOD AND SYSTEM FOR DECODING 8-BIT/10-BIT DATA USING LIMITED WIDTH DECODERS Thomas W. Bucht
6,643,693	US	09-15-1998	METHOD AND SYSTEM FOR MANAGING I/O TRANSMISSIONS IN A FIBRE CHANNEL NETWORK AFTER A BREAK IN COMMUNICATION Robert A. Reynolds

<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
6,650,656	US	02-28-2002	METHOD AND SYSTEM FOR RECONCILING EXTENDED COPY COMMAND TARGET DESCRIPTOR LENGTHS John F. Tyndall
6,654,824	US	10-03-2001	HIGH-SPEED DYNAMIC MULTI-LANE DESKEWER Diego Fernando Vila
6,668,290	US	10-24-2000	SYSTEM AND METHOD FOR CONTROLLING READOUT OF FRAME DATA FROM BUFFER Michael A. Nelson
6,704,809	US	02-28-2002	METHOD AND SYSTEM FOR OVERLAPPING DATA FLOW WITHIN A SCSI EXTENDED COPY COMMAND John F. Tyndall
6,704,836	US	11-13-2002	METHOD FOR DYNAMIC CONTROL OF CONCURRENT EXTENDED COPY TASKS Robert M. Griswold, Jr.
6,718,402	US	11-29-2000	METHOD AND SYSTEM FOR PERSISTENT UNIT ATTENTION IN A FIBRE CHANNEL STORAGE ROUTER Keith Arroyo
6,757,348	US	10-04-2001	HIGH-SPEED COORDINATED MULTI-CHANNEL ELASTIC BUFFER Diego Fernando Vila
6,804,753	US	10-04-2002	PARTITIONED LIBRARY William H. Moody II
6,848,007	US	11-10-2000	A SYSTEM FOR MAPPING ADDRESSES OF SCSI DEVICES BETWEEN PLURALITY OF SANs THAT CAN DYNAMICALLY MAP SCSI DEVICE ADDRESSES ACROSS A SAN EXTENDER Robert Allen Reynolds
6,894,979	US	04-24-2001	NETWORK ANALYZER/SNIFFER WITH MULTIPLE PROTOCOL CAPABILITIES David G. Lee
6,922,391	US	11-07-2000	METHOD AND SYSTEM FOR DECREASING ROUTING LATENCY FOR SWITCHING PLATFORMS WITH VARIABLE CONFIGURATION Steve King
6,965,934	US	11-10-2000	ENCAPSULATION PROTOCOL FOR LINKING STORAGE AREA NETWORKS OVER A PACKET-BASED NETWORK Robert A. Reynolds
6,970,942	US	11-07-2000	METHOD OF ROUTING HTTP AND FTP SERVICES ACROSS HETEROGENEOUS NETWORKS Steve King
6,977,897	US	10-24-2000	SYSTEM AND METHOD FOR JITTER COMPENSATION IN DATA TRANSFERS Michael A. Nelson
7,024,591	US	07-12-2002	MECHANISM FOR ENABLING ENHANCED FIBRE CHANNEL ERROR RECOVERY ACROSS REDUNDANT PATHS USING SCSI LEVEL COMMANDS William H. Moody II
7,127,572	US	02-19-2004	CONSOLIDATION OF UNIT ATTENTIONS John F. Tyndall
7,185,028	US	03-11-2003	DATA FILES SYSTEMS WITH HIERARCHICAL RANKING FOR DIFFERENT ACTIVITY GROUPS

<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
			Ulrich Lechner
7,251,708	US	08-07-2003	SYSTEM AND METHOD FOR MAINTAINING AND REPORTING A LOG OF MULTI-THREADED BACKUPS Steven A. Justiss
7,254,329	US	03-05-2004	METHOD AND SYSTEM FOR MULTI-INITIATOR SUPPORT TO STREAMING DEVICES IN A FIBRE CHANNEL NETWORK Robert A. Reynolds
7,310,696	US	01-27-2005	METHOD AND SYSTEM FOR COORDINATING INTEROPERABILITY BETWEEN DEVICES OF VARYING CAPABILITIES IN A NETWORK John B. Haechten
7,327,223	US	01-26-2005	METHOD AND SYSTEM FOR DISTRIBUTING MANAGEMENT INFORMATION OVER POWER NETWORKS Bryan Schlinger
7,333,489	US	10-24-2000	SYSTEM AND METHOD FOR STORING FRAME HEADER DATA Michael A. Nelson
7,350,114	US	09-01-2005	MECHANISM FOR ENABLING ENHANCED FIBRE CHANNEL ERROR RECOVERY ACROSS REDUNDANT PATHS USING SCSI LEVEL COMMANDS William H. Moody II
7,370,173	US	01-28-2005	METHOD AND SYSTEM FOR PRESENTING CONTIGUOUS ELEMENT ADDRESSES FOR A PARTITIONED MEDIA LIBRARY Steven A. Justiss
7,415,564	US	08-15-2007	METHOD AND SYSTEM FOR COORDINATING INTEROPERABILITY BETWEEN DEVICES OF VARYING FUNCTIONALITY IN A NETWORK John B. Haechten
7,424,075	US	07-31-2003	PSEUDORANDOM DATA PATTERN VERIFIER WITH AUTOMATIC SYNCHRONIZATION Diego F. Vila
7,428,613	US	06-29-2004	SYSTEM AND METHOD FOR CENTRALIZED PARTITIONED LIBRARY MAPPING Steven A. Justiss
7,447,852	US	12-22-2004	SYSTEM AND METHOD FOR MESSAGE AND ERROR REPORTING FOR MULTIPLE CONCURRENT EXTENDED COPY COMMANDS TO A SINGLE DESTINATION DEVICE Steven A. Justiss
7,448,049	US	08-22-2003	SYSTEM AND METHOD OF SUPPORTING KERNEL FUNCTIONALITY Lisheng Xing
7,451,291	US	01-28-2005	SYSTEM AND METHOD FOR MODE SELECT HANDLING FOR A PARTITIONED MEDIA LIBRARY Steven A. Justiss
7,453,348	US	06-18-2007	METHOD AND SYSTEM FOR DISTRIBUTING MANAGEMENT INFORMATION OVER POWER NETWORKS Bryan Schlinger
7,454,565	US	06-29-2004	SYSTEM AND METHOD FOR DISTRIBUTED

<b>Patent or application no.</b>	<b>Country</b>	<b>Filing Date (mm-dd-yyyy)</b>	<b>Title of Patent and First Named Inventor</b>
			PARTITIONED LIBRARY MAPPING Steven A. Justiss
7,500,047	US	12-03-2004	SYSTEM AND METHOD FOR PROCESSING COMMANDS John F. Tyndall
7,505,980	US	11-07-2003	SYSTEM AND METHOD FOR CONTROLLING ACCESS TO MULTIPLE PHYSICAL MEDIA LIBRARIES John F. Tyndall
7,508,756	US	03-28-2005	METHOD AND SYSTEM FOR DECREASING ROUTING LATENCY FOR SWITCHING PLATFORMS WITH VARIABLE CONFIGURATION Steve King
7,509,330	US	09-03-2004	APPLICATION-LAYER MONITORING OF COMMUNICATION BETWEEN ONE OR MORE DATABASE CLIENTS AND ONE OR MORE DATABASE SERVERS David B. Ewing
7,529,753	US	09-03-2004	PROVIDING APPLICATION-LAYER FUNCTIONALITY BETWEEN ONE OR MORE DATABASE CLIENTS AND ONE OR MORE DATABASE SERVERS David B. Ewing
7,552,294	US	12-22-2004	SYSTEM AND METHOD FOR PROCESSING MULTIPLE CONCURRENT EXTENDED COPY COMMANDS TO A SINGLE DESTINATION DEVICE Steven A. Justiss
7,584,190	US	02-16-2007	DATA FILES SYSTEMS WITH HIERARCHICAL RANKING FOR DIFFERENT ACTIVITY GROUPS Ulrich Lechner
7,584,318	US	11-02-2007	APPARATUS FOR COORDINATING INTEROPERABILITY BETWEEN DEVICES OF VARYING CAPABILITIES IN A NETWORK John B. Haechten
7,603,449	US	06-10-2002	SYSTEM AND METHOD FOR INQUIRY CACHING Stephen G. Dale
7,711,805	US	12-22-2004	SYSTEM AND METHOD FOR COMMAND TRACKING Stephen G. Dale
7,711,871	US	08-30-2004	INTERFACE DEVICE AND METHOD FOR COMMAND PROCESSING John B. Haechten
7,711,913	US	04-20-2007	SYSTEM AND METHOD FOR BACKING UP EXTENDED COPY COMMANDS William H. Moody II
7,716,406	US	03-01-2006	METHOD AND SYSTEM FOR PERSISTENT RESERVATION HANDLING IN A MULTI-INITIATOR ENVIRONMENT John F. Tyndall
7,752,384	US	11-07-2003	SYSTEM AND METHOD FOR CONTROLLING ACCESS TO MEDIA LIBRARIES William H. Moody II
7,752,416	US	09-25-2008	SYSTEM AND METHOD FOR DISTRIBUTED PARTITIONED LIBRARY MAPPING Steven A. Justiss
7,788,413	US	04-29-2005	METHOD AND SYSTEM FOR HANDLING COMMANDS

<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
			REQUESTING MOVEMENT OF A DATA STORAGE MEDIUM BETWEEN PHYSICAL MEDIA LIBRARIES Steven A. Justiss
7,827,261	US	12-22-2004	SYSTEM AND METHOD FOR DEVICE MANAGEMENT Robert M. Griswold, Jr.
7,831,621	US	09-27-2007	SYSTEM AND METHOD FOR SUMMARIZING AND REPORTING IMPACT OF DATABASE STATEMENTS Kevin Banks
7,895,160	US	01-26-2009	APPLICATION-LAYER MONITORING OF COMMUNICATION BETWEEN ONE OR MORE DATABASE CLIENTS AND ONE OR MORE DATABASE SERVERS David B. Ewing
7,899,945	US	04-30-2010	INTERFACE DEVICE AND METHOD FOR COMMAND PROCESSING John B. Haechten
7,904,539	US	03-13-2009	SYSTEM AND METHOD FOR SERVICING INQUIRY COMMANDS ABOUT TARGET DEVICES IN STORAGE AREA NETWORK Stephen G. Dale
7,908,252	US	03-19-2008	SYSTEM AND METHOD FOR VERIFYING PATHS TO A DATABASE Matthew Eugene Landt
7,908,366	US	02-01-2008	MEDIA LIBRARY MONITORING SYSTEM AND METHOD Robert C. Sims
7,912,053	US	03-23-2009	METHOD AND SYSTEM FOR DECREASING ROUTING LATENCY FOR SWITCHING PLATFORMS WITH VARIABLE CONFIGURATION Steve King
7,941,597	US	06-07-2010	SYSTEM AND METHOD FOR CONTROLLING ACCESS TO MEDIA LIBRARIES William H. Moody II
7,962,513	US	10-30-2006	SYSTEM AND METHOD FOR DEFINING AND IMPLEMENTING POLICIES IN A DATABASE SYSTEM David Boles
7,971,006	US	01-28-2005	SYSTEM AND METHOD FOR HANDLING STATUS COMMANDS DIRECTED TO PARTITIONED MEDIA LIBRARY Steven A. Justiss
7,971,019	US	02-23-2009	SYSTEM AND METHOD FOR CONTROLLING ACCESS TO MULTIPLE PHYSICAL MEDIA LIBRARIES John F. Tyndall
7,974,215	US	02-04-2008	SYSTEM AND METHOD OF NETWORK DIAGNOSIS Robert C. Sims
7,975,124	US	04-16-2010	SYSTEM AND METHOD FOR DISTRIBUTED PARTITIONED LIBRARY MAPPING Steven A. Justiss
7,984,073	US	06-15-2005	SYSTEM AND METHOD FOR PROVIDING SERVICE MANAGEMENT IN A DISTRIBUTED DATABASE SYSTEM Jack Basiago
8,156,215	US	10-29-2010	SYSTEM AND METHOD FOR DEVICE MANAGEMENT

<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
			Robert M. Griswold, Jr.
8,250,378	US	02-04-2008	SYSTEM AND METHOD FOR ENABLING ENCRYPTION Robert C. Sims
8,271,673	US	08-09-2004	STREAMING METHOD AND SYSTEM FOR FIBRE CHANNEL NETWORK DEVICES Keith M. Arroyo
8,341,211	US	09-14-2007	SYSTEM AND METHOD FOR INQUIRY CACHING IN A STORAGE AREA NETWORK Stephen G. Dale
11/801,809 US 2008/0282265	US	05-11-2007	METHOD AND SYSTEM FOR NON-INTRUSIVE MONITORING OF LIBRARY COMPONENTS Michael R. Foster
12/025,436 US 2009/0198737	US	02-04-2008	SYSTEM AND METHOD FOR ARCHIVE VERIFICATION Robert C. Sims
12/115,218 US 2009/0274300	US	05-05-2008	METHOD FOR CONFIGURING THE ENCRYPTION POLICY FOR A FIBRE CHANNEL DEVICE Patrick S. Tou
12/692,403 US 2010/0182887	US	01-22-2010	SYSTEM AND METHOD FOR IDENTIFYING FAILING DRIVES OR MEDIA IN MEDIA LIBRARY William H. Moody II
13/042,209 US 2011/0161584	US	03-07-2011	SYSTEM AND METHOD FOR INQUIRY CACHING IN A STORAGE AREA NETWORK Stephen G. Dale
13/091,877 US 2011/0194451	US	04-21-2011	SYSTEM AND METHOD OF NETWORK DIAGNOSIS Robert C. Sims
13/312,068 US 2012/0079131	US	12-06-2011	STREAMING METHOD AND SYSTEM FOR FIBRE CHANNEL NETWORK DEVICES Keith M. Arroyo
13/430,429 US 2012/0185589	US	03-26-2012	MEDIA LIBRARY MONITORING SYSTEM AND METHOD Robert C. Sims
13/459,720 US 2012/0221597	US	04-30-2012	MEDIA LIBRARY MONITORING SYSTEM AND METHOD Robert C. Sims
13/685,539 US 2013/0080568	US	11-26-2012	SYSTEM AND METHOD FOR CACHING INQUIRY DATA ABOUT SEQUENTIAL ACCESS DEVICES Stephen G. Dale
AU 737205	AU	05-29-1998	ERROR DETECTION AND RECOVERY FOR SEQUENTIAL ACCESS DEVICES IN A FIBRE CHANNEL PROTOCOL Geoffrey B. Hoese
EP 2 526 488	EP	01-18-2011	SYSTEM AND METHOD FOR IDENTIFYING FAILING DRIVES OR MEDIA IN MEDIA LIBRARY William H. Moody
12/025,300	US		DETERMINING, DISPLAYING AND USING TAPE DRIVE SESSION INFORMATION
12/201,956	US		SYSTEM AND METHOD FOR ADJUSTING TO DRIVE SPECIFIC CRITERIA
12/888,954	US		SYSTEM AND METHOD FOR ELIMINATING PERFORMANCE IMPACT OF INFORMATION COLLECTION FROM MEDIA DRIVES



<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
12/861,609	US		SYSTEM AND METHOD FOR ARCHIVE VERIFICATION ACCORDING TO POLICIES
12/861,612	US		SYSTEM AND METHOD FOR ARCHIVE VERIFICATION USING MULTIPLE ATTEMPTS
13/109,192	US		SYSTEM AND METHOD FOR IMPLEMENTING A NETWORKED FILE SYSTEM UTILIZING A MEDIA LIBRARY
13/267,758	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR OPTIMIZATION OF TAPE PERFORMANCE
13/267,763	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR OPTIMIZATION OF TAPE PERFORMANCE USING DISTRIBUTED FILE COPIES
13/267,665	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR TRICKLING DATA TO A HOST
13/267,743	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR RETRIEVING A FILE AFTER AN ERROR
13/451,812	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR A SELF-DESCRIBING TAPE
13/847,965	US		SYSTEM AND METHOD FOR ENHANCING DATA RELIABILITY AND RECOVERING FROM MEDIA ERRORS
13/531,310	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR HOST SYSTEM LTFS AUTO-ADAPTATION
13/532,512	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR CONTROLLING FILE MIGRATION IN ARCHIVING SYSTEMS
13/532,518	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR SYNCHRONIZING DATA WRITTEN TO TAPE AND RECOVERING IN THE CASE OF FAILURE
13/485,060	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR RECOVERING STUB FILES
13/614,857	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR PARTIALLY SYNCHRONOUS AND PARTIALLY ASYNCHRONOUS MOUNTS/UNMOUNTS IN A MEDIA LIBRARY
13/459,531	US		SYSTEM AND METHOD FOR USING A MEMORY

<b>Patent or application no.</b>	<b>Country</b>	<b>Filing Date (mm-dd-yyyy)</b>	<b>Title of Patent and First Named Inventor</b>
			BUFFER TO STREAM DATA FROM A TAPE TO MULTIPLE CLIENTS
13/480,781	US		SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR TAMPER PROTECTION IN A DATA STORAGE SYSTEM
102 11 606			
PCT/US13/038755			

(b) all patents and patent applications (i) to which any of the Patents directly or indirectly claims priority; or (ii) for which any of the Patents directly or indirectly forms a basis for priority;

(c) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions, registrations of any item in any of the foregoing categories (a) and (b);

(d) all foreign patents, patent applications, and counterparts relating to any item in any of the foregoing categories (a) through (c), including, without limitation, certificates of invention, utility models, industrial design protection, design patent protection, and other governmental grants or issuances;

(e) all items in any of the foregoing in categories (b) through (d), whether or not expressly listed as Patents above and whether or not claims in any of the foregoing have been rejected, withdrawn, cancelled, or the like;

(f) inventions, invention disclosures, and discoveries described in any of the Patents or any item in the foregoing categories (b) through (e) that (i) are included in any claim in the Patents or any item in the foregoing categories (b) through (e); (ii) are subject matter capable of being reduced to a patent claim in a reissue or reexamination proceeding brought on any of the Patents or any item in the foregoing categories (b) through (e); or (iii) could have been included as a claim in any of the Patents or any item in the foregoing categories (b) through (e), except to the extent any such inventions, invention disclosures, discoveries or items in the foregoing categories (b)-(e) described in this category (f) are, or are described or claimed in, any patent or patent application of Assignor that is not being assigned through this Agreement;

(g) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (f), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;

(h) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents or any item in any of the foregoing categories (b) through (g), including, without limitation, all causes of action and other enforcement rights for (1) damages; (2) injunctive relief, and (3) any other remedies of any kind for past, current, and future infringement; and

(i) all rights to collect royalties and other payments under or on account of any of the Patents or any item in any of the foregoing categories (b) through (h), excluding any and all license agreements of Assignor existing prior to the Effective Date.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein, subject to licenses to certain third parties.

Assignor represents and warrants to Assignee, except as set forth on the Schedule of Exceptions attached as Exhibit A, which exceptions shall be deemed to be part of the representations and warranties made hereunder, as follows:

(1) Assignor is a company duly formed, validly existing, and in good standing under the laws of its formation jurisdiction. Assignor has the full power and authority to sell, assign, transfer and convey the Patent Rights to Assignee.

(2) Assignor owns all right, title, and interest to the Patent Rights and the Patents are all of the currently existing patents and patent applications of Assignor, with the exception of US Patent Nos. 7,603,449, 7,904,539, and 8,341,211 and U.S. Patent Application Serial Nos. 13/042,209 and 13/685,539 (including any patents or applications claiming priority to the foregoing), each of which is jointly assigned to Assignor and Hewlett-Packard Company. Assignor has obtained and properly recorded previously executed assignments for the Patent Rights as necessary to fully perfect its rights and title therein in accordance with governing law and regulations in each respective jurisdiction. Except for the security interest granted by Assignor to Fortress Credit Co LLC, the Patent Rights are free and clear of all security interests or other encumbrances of any kind. There are no actions, suits, investigations, claims, or proceedings threatened, pending, or in progress relating in any way to the Patent Rights. To the Assignor's knowledge, based on reasonable due diligence and investigation conducted at the time of filing, all inventors named on the Patents are true and correct.

(3) There is no obligation imposed by a standards-setting organization to license any of the Patents on particular terms or conditions. No licenses under the Patents have been granted to any other third party and Assignee will not be subject to any covenant not to sue or other restrictions on its enforcement or enjoyment of the Patent Rights.

(4) Except as set forth in the Schedule of Exceptions, none of the Patents has ever been found invalid, unpatentable, or unenforceable for any reason in any proceeding and Assignor does not know of and has not received any notice or information of any kind suggesting that the Patents may be invalid, unpatentable, or unenforceable, other than official notices from patent offices in the course of patent prosecution. To the extent "small entity" fees were paid to the United States Patent and Trademark Office for any Patent, such reduced fees were then appropriate because the payor qualified to pay "small entity" fees at the time of such payment and specifically had not licensed rights in any of the Patents to an entity that was not a "small entity." If any of the Patents are terminally disclaimed to another patent or patent application, all patents and patent applications subject to such terminal disclaimer are included in the Patents.

(5) To Assignor's knowledge none of Assignor, any prior owner, or their respective agents or representatives have engaged in any conduct, or omitted to perform any necessary act, the result of which would invalidate any of the Patents or hinder their enforcement.

(6) Assignor has not (a) put a third party on notice of actual or potential infringement of any of the Patents; (b) invited any third party to enter into a license under any of the Patents; or (c) initiated any enforcement action with respect to any of the Patents.

(7) Except as may have been disclosed by Assignor to Assignee, none of the Patents has been or is currently involved in any reexamination, supplemental examination, reissue, interference proceeding, or any similar proceeding, and no such proceedings are pending or threatened.

(8) All maintenance fees, annuities, and other amounts due or payable on the Patents have been timely paid.

Assignor will, at the reasonable request of Assignee, and provided Assignee bears the cost of doing so, do all things reasonably within its power and that are necessary, proper, or advisable, including without limitation, the execution, acknowledgment, and recordation of specific assignments, oaths, declarations, and other documents on a country-by-country basis, to assist Assignee in obtaining, perfecting, sustaining, or enforcing the Patent Rights.

The terms and conditions of this Assignment of Patent Rights will inure to the benefit of Assignee, its successors, assigns, and other legal representatives and will be binding upon Assignor, its successors, assigns, and other legal representatives.

This Assignment will be governed by and construed in accordance with the laws of the State of New York without regard to its rules of conflict of law, except Section 5-1401 of the New York General Obligations Law; provided, however, that the prosecution, perfection, issuance, maintenance, validity and enforceability of any Patent Rights arising under the laws of any other jurisdiction, and the interpretation and enforceability of any rights granted under such Patent Rights, will be governed by the laws of that jurisdiction without reference to choice of law principles to the contrary. Assignor hereby irrevocably submits to the nonexclusive jurisdiction of any New York State or Federal court sitting in the County of New York over any suit, action or proceeding arising out of or relating to this Assignment, and Assignor hereby agrees and consents that, in addition to any methods of service of process provided for under applicable law, all service of process in any such suit, action or proceeding in any New York State or Federal court sitting in the County of New York may be made by certified or registered mail, return receipt requested, or overnight mail with a reputable national carrier, directed to the Assignor at the address indicated above, and service so made shall be complete five (5) days after the same shall have been so mailed (one day in the case of an overnight mail service).

This Assignment represents the entire agreement about the subject matter of this Assignment and supersedes prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Assignment merge into this Assignment.

[Signature page follows.]

IN WITNESS WHEREOF this Assignment of Patent Rights is executed on July 22, 2013.

ASSIGNOR:

CROSSROADS SYSTEMS, INC.

By:

Name:

Title:

(Signature MUST be attested.)

ATTESTATION OF SIGNATURE UNDER 28 U.S.C. § 1746

The undersigned witnessed the signature of RICHARD K. COLEMAN, JR. to the above Assignment of Patent Rights on behalf of Crossroads Systems, Inc. and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. RICHARD K. COLEMAN, JR. is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on July 22, 2013 to execute the above Assignment of Patent Rights on behalf of Crossroads Systems, Inc.
3. RICHARD K. COLEMAN, JR. subscribed to the above Assignment of Patent Rights on behalf of Crossroads Systems, Inc.

I declare under penalty of perjury under the laws of the United States of America that the statements made in the three (3) numbered Sections immediately above are true and correct.

EXECUTED on JULY 22, 2013 (date)

Print Name:

TRACY R. COLEMAN

[Signature and Attestation Page to Crossroads Patent Assignment]

## Exhibit A

### Schedule of Exceptions

(2); (3) Right, Title and Interest; Licenses/Covenants. Each of the parties identified below has license rights and/or a covenant not to be sued under one or more of the Patents under the terms of the agreements identified below:

(i) Crossroads Systems, Inc. - Non-Exclusive License Agreement between Crossroads IP I, L.P. and Crossroads Systems, Inc. providing Crossroads Systems, Inc. a license under the Patents;

(ii) HP/3Par - Confidential Settlement and License Agreement between Crossroads Systems, Inc. and Hewlett-Packard and 3Par, Inc. dated October 17, 2011;

(iii) Brocade - Patent License Agreement between Crossroads Systems, Inc. and Brocade Communications Switzerland SarL dated June 4, 2006 and Patent License Agreement Amendment I dated October 26, 2007;

(iv) EMC - Development Agreement between Crossroads Systems, Inc. and EMC Corporation dated March 18, 2003;

(v) Hitachi - License Agreement between Crossroads Systems, Inc. and Hitachi, Ltd. dated September 15, 2003;

(vi) IBM - License Agreement between Crossroads Systems, Inc. and International Business Machines Corporation dated June 24, 2011;

(vii) Microsoft - Microsoft-Crossroads Patent Cross License Agreement between Crossroads Systems, Inc. and Microsoft Corporation dated October 28, 2010;

(viii) Overland - Settlement Agreement between Crossroads Systems, Inc. and Overland Storage, Inc. dated May 18, 2010;

(ix) QLogic - Settlement Agreement between Crossroads Systems, Inc. and QLogic Corporation dated March 26, 2010;

(x) Stonefly - Patent License Agreement between Crossroads Systems, Inc. and Stonefly Networks, Inc. dated February 20, 2004;

(xi) Symantec - Patent License Agreement between Crossroads Systems, Inc. and Symantec Corporation dated June 17, 2009; and

(xii) XIOTech - Patent License Agreement between Crossroads Systems, Inc. and XIOTech Corp. dated July 2003.

(3) Standards Setting Organizations. Crossroads is or has been a member of the following standards bodies: Storage Networking Industry Association (SNIA), International Committee for Information Technology Standards (INCITS), Internet Engineering Task Force (IETF) and National Committee for Information Technology Standards (NCITS), collectively referred to as "Crossroads Standards Organizations." Each of the Crossroads Standards Organizations has, or has had, one or more

*[Exhibit A to Crossroads Patent Assignment]*

policies over the years regarding intellectual property of its members and potential obligations, or lack thereof, regarding licensing of same.

(6) Notice/Invitations. To the Assignor's knowledge, based on reasonable due diligence and investigation, Crossroads has provided notice to third parties regarding actual/potential infringement and/or provided an invitation to license certain of the Patents as outlined below:

(i) Crossroads, through its general counsel Patricia Prince, may invited third parties prior to 2002 to license one or more of the Patents that issued prior to 2003.

(ii) Crossroads sent the following companies letters inviting them to take a license to one or both of US Patent Nos. 6,041,381 and 6,138,161 (two of the Patents):

- a. ATTO Technology, Inc.
- b. Bakbone Software, Inc.
- c. Cereva Networks, Inc.
- d. Ciprico, Inc.
- e. Cisco Systems, Inc.
- f. CMD Technology, Inc.
- g. CommVault Systems, Inc.
- h. Computer Associates International, Inc.
- i. Computer Network Technology Corporation
- j. Datacore Software Corporation
- k. DataDirect Networks, Inc.
- l. Dot Hill Systems Corporation
- m. EMC Corporation
- n. Emulex Corporation
- o. Falconstor Software, Inc.
- p. FileFish, Inc.
- q. Fujitsu Computer Products of America, Inc.
- r. Gadzook Networks
- s. Hitachi, Ltd
- t. International Business Machines Corporation
- u. IIS Intelligent Information Systems, LTD
- v. Infortrend Corporation
- w. InRange Technologies Corporation
- x. Integrix, Inc.
- y. InterSAN, Inc.
- z. KOM, Inc.
- aa. Legato Systems, Inc.
- bb. McData Corporation
- cc. MTI Technology Corp.
- dd. National Semiconductor Corporation
- ee. NearTek, Inc.
- ff. Nexsan Corporation
- gg. Nishan Systems, Inc.
- hh. OTC Software, Inc.
- ii. Panasas, LLC
- jj. Pirus Networks, Inc.
- kk. Prisa Networks, Inc.
- ll. Prismedia
- mm. QLogic Corporation

nn. Raidtec Corporation  
oo. Rhapsody Networks, Inc.  
pp. SANavigator, Inc.  
qq. SanCastle Technologies, Inc.  
rr. SanGate Systems, Inc.  
ss. San One, Inc.  
tt. SanRise, Inc.  
uu. SAN Valley Systems, Inc.  
vv. Spectralogic Corporation  
ww. Storage Computer Corporation  
xx. Storage Networks, Inc.  
yy. Storage Networking Technologies, Ltd  
zz. Topspin Communications, Inc.  
aaa. Troika Networks, Inc.  
bbb. TrueSan Networks, Inc.  
ccc. Vicom Systems, Inc.  
ddd. Vixel Corporation  
eee. Xiotech Corporation  
fff. Yotta Yotta, Inc.  
ggg. ZZYZX Peripherals, Inc.



**Exhibit B**

**'972 Patents**

<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
5,941,972	US	12-31-1997	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
6,421,753	US	7-15-1999	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
6,425,036	US	9-27-2001	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
6,425,035	US	9-27-2001	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
6,789,152	US	2-22-2002	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
6,738,854	US	6-19-2002	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
6,763,419	US	2-10-2003	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,051,147	US	9-9-2003	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,340,549	US	2-14-2006	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,689,754	US	9-7-2007	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,552,266	US	9-7-2007	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,694,058	US	9-7-2007	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
8,046,515	US	10-31-2007	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,984,221	US	11-29-2007	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
US RE42,761	US	7-24-2008	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,937,517	US	9-2-2009	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.

<u>Patent or application no.</u>	<u>Country</u>	<u>Filing Date (mm-dd-yyyy)</u>	<u>Title of Patent and First Named Inventor</u>
7,934,040	US	9-2-2009	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
8,015,339	US	9-2-2009	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,934,041	US	1-10-2010	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,984,224	US	10-22-2010	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
8,028,117	US	10-22-2010	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
8,402,193	US	10-22-2010	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
7,987,311	US	10-22-2010	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
8,402,194	US	8-3-2011	Storage Router and Method for Providing Virtual Local Storage; Hoesse Geoffrey B.
13/766,301	US	2-13-2013	Storage Router and Method for Providing Virtual Local Storage.
CA 2,315,199	CA	12-28-1998	Storage Router and Method for Providing Virtual Local Storage.
DE 69832818.3	DE	12-28-1998	Storage Router and Method for Providing Virtual Local Storage..
1 044 414	EP, FR, GB	12-28-1998	Storage Router and Method for Providing Virtual Local Storage..
4691251	JP	12-28-1998	Storage Router and Method for Providing Virtual Local Storage.
EP 05027161 EP 1 696 638	EP	12-28-1998	Storage Router and Method for Providing Virtual Local Storage.
EP 10012770.3 EP 2 375 699	EP	12-28-1998	Storage Router and Method for Providing Virtual Local Storage.
EP 10012768.7 EP 2 375 698	EP	12-28-1998	Storage Router and Method for Providing Virtual Local Storage