PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAMBUS INC.	03/17/2014

RECEIVING PARTY DATA

Name:	III HOLDINGS 1, LLC
Street Address:	2711 CENTERVILLE RD.
Internal Address:	SUITE 400
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19808

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14922600

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	27994US25
NAME OF SUBMITTER:	JEFFREY B. HUTER
SIGNATURE:	/Jeffrey B. Huter/
DATE SIGNED:	10/27/2015

Total Attachments: 18
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ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Rambus Inc., a Delaware corporation, with an office at 1050 Enterprise Way, Suite 700, Sunnyvale, CA 94089 (**"*Assignor*"**), does hereby sell, assign, transfer, and convey unto III Holdings 1, LLC, a Delaware limited liability company with an address at 2711 Centerville Rd, Suite 400, Wilmington, DE 19808 (**"*Assignee*"**), or its designees, all 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) the provisional patent applications, patent applications and patents listed in the table below (the "***Patents***");

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
7818357	US	11/23/2005	Systems and methods for implementing CORDIC rotations for projectors and related operators Leo Bredehoft
6538336	US	11/14/2000	Wirebond assembly for high-speed integrated circuits David A. Secker
8063481	US	02/20/2008	High-speed memory package Ming Li
6711219	US	11/19/2001	Interference cancellation in a signal John K. Thomas
6856945	US	11/19/2001	Method and apparatus for implementing projections in signal processing applications John K. Thomas

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
6750818	US	06/25/2002	Method and apparatus to compute the geolocation of a communication device using orthogonal projections John K. Thomas
7158559	US	09/20/2002	Serial cancellation receiver design for a coded signal processing engine Eric S. Olson
IN207819	IN	10/01/2002	INTERFERENCE CANCELLATION IN A SIGNAL John Thomas
EP02776047.9	EP	10/01/2002	INTERFERENCE CANCELLATION IN A SIGNAL John Thomas
CNZL02823495.2	CN	10/01/2002	INTERFERENCE CANCELLATION IN A SIGNAL John Thomas
JP4173100	JP	10/01/2002	INTERFERENCE CANCELLATION IN A SIGNAL John Thomas

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
CNZL02822547.3	CN	11/15/2002	Construction of an interference matrix for a coded signal processing engine Eric S. Olson
7200183	US	11/15/2002	Construction of an interference matrix for a coded signal processing engine Eric S. Olson
IN224984	IN	11/15/2002	A METHOD AND APPARATUS FOR GENERATING AN INTERFERENCE MATRIX Eric S. Olson
JP4295112	JP	11/15/2002	CONSTRUCTION OF AN INTERFERENCE MATRIX FOR A CODED SIGNAL PROCESSING ENGINE Eric S. Olson
IN235516	IN	11/21/2002	METHOD AND APPARATUS FOR DETERMINING GEOLOCATION OF A MOBILE TRANSMITTER John K. Thomas
IN254401	IN	01/13/2003	A SERIAL RECEIVER FOR A WIRELESS COMMUNICATION SYSTEM Eric S. Olson
7787518	US	09/23/2003	Method and apparatus for selectively applying interference cancellation in spread spectrum systems Anand P. Narayan

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
DE60342546.1	DE	09/23/2003	Method and Apparatus for Selectively Applying Interference Cancellation in Spread Spectrum Systems Anand P. Narayan
FR1550233	FR	09/23/2003	Method and Apparatus for Selectively Applying Interference Cancellation in Spread Spectrum Systems Anand P. Narayan
GB1550233	GB	09/23/2003	Method and Apparatus for Selectively Applying Interference Cancellation in Spread Spectrum Systems Anand P. Narayan
IN212722	IN	09/23/2003	METHOD AND APPARATUS FOR SELECTIVELY ENABLING SIGNAL INTERFERENCE CANCELLATION Anand P. Narayan
CNZL03825202.3	CN	09/23/2003	Method and apparatus for selectively applying interference cancellation in spread spectrum systems Anand P. Narayan
KR10-1011942	KR	09/23/2003	Method and Apparatus for Selectively Applying Interference Cancellation in Spread Spectrum Systems Anand P. Narayan

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
JP4444832	JP	09/23/2003	Method and Apparatus for Selectively Applying Interference Cancellation in Spread Spectrum Systems Anand P. Narayan
CNZL200380105881.3	CN	10/15/2003	Chip level phase adjustment Anand P. Narayan
FR1579591	FR	10/15/2003	METHOD AND APPARATUS FOR CHANNEL AMPLITUDE ESTIMATION AND INTERFERENCE VECTOR CONSTRUCTION Anand P. Narayan
IN240171	IN	10/15/2003	A METHOD FOR DETECTING VALID CHANNELS IN A COMMUNICATION SYSTEM EMPLOYING A PLURALITY OF WALSH CODE LENGTHS;A METHOD FOR CALCULATING INTERFERENCE CALCULATION VALUES FOR CANCELLING INTERFERENCE IN A RECEIVED COMMUNICATIONS SIGNAL; AN APPARATUS AND RECEIVER DEVICE THEREFOR Anand P. Narayan

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
DE60341175.4	DE	10/15/2003	METHOD AND APPARATUS FOR CHANNEL AMPLITUDE ESTIMATION AND INTERFERENCE VECTOR CONSTRUCTION Anand P. Narayan
7580448	US	10/15/2003	Method and apparatus for channel amplitude estimation and interference vector construction Anand P. Narayan
7430253	US	10/15/2003	Method and apparatus for interference suppression with efficient matrix inversion in a DS-CDMA system Eric S.Olson
JP4210649	JP	10/15/2003	METHOD AND APPARATUS FOR CHANNEL AMPLITUDE ESTIMATION AND INTERFERENCE VECTOR CONSTRUCTION Anand P. Narayan
7068706	US	10/15/2003	System and method for adjusting phase Anand P. Narayan
7039136	US	01/23/2004	Interference cancellation in a signal Eric S.Olson

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
7394879	US	02/06/2004	Systems and methods for parallel signal cancellation Eric S. Olson
7577186	US	09/07/2004	Interference matrix construction John K. Thomas
7474690	US	09/07/2004	Systems and methods for parallel signal cancellation Anand P. Narayan
7260506	US	10/06/2004	Orthogonalization and directional filtering John K. Thomas
7477710	US	12/07/2004	Systems and methods for analog to digital conversion with a signal cancellation system of a receiver Anand P. Narayan
7359465	US	04/11/2005	Serial cancellation receiver design for a coded signal processing engine Eric S.Olson
7463609	US	07/29/2005	Interference cancellation within wireless transceivers Louis L. Scharf

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
7787572	US	08/15/2005	Advanced signal processors for interference cancellation in baseband receivers Louis L. Scharf
11/233636	US	09/23/2005	Optimal feedback weighting for soft-decision cancellers John K. Thomas
7876810	US	11/04/2005	Soft weighted interference cancellation for CDMA systems Michael L. Mccloud
7808937	US	11/10/2005	Variable interference cancellation technology for CDMA systems Michael L. Mccloud
IN2629/KOLNP/2007	IN	12/08/2005	GAIN CONTROL FOR INTERFERENCE CANCELLATION Anand Narayan
7697595	US	05/11/2006	INTERFERENCE CANCELLATION IN VARIABLE CODELENGTH SYSTEMS FOR MULTI-ACCESS COMMUNICATION Vijay Nagarajan

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
7991088	US	06/13/2006	Iterative interference cancellation using mixed feedback weights and stabilizing step sizes Tommy Guess
7702048	US	06/13/2006	Iterative interference cancellation using mixed feedback weights and stabilizing step sizes Tommy Guess
7711075	US	06/13/2006	Iterative interference cancellation using mixed feedback weights and stabilizing step sizes Tommy Guess
7715508	US	06/13/2006	Iterative interference cancellation using mixed feedback weights and stabilizing step sizes Tommy Guess
7733941	US	06/29/2006	Inter-symbol interference cancellation for wireless multiple access Michael L. Mccloud
7826516	US	07/24/2006	Iterative interference canceller for wireless multiple-access systems with multiple receive antennas Tommy Guess

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
7623602	US	08/25/2006	Iterative interference canceller for wireless multiple-access systems employing closed loop transmit diversity Tommy Guess
8005128	US	08/17/2007	METHODS FOR ESTIMATION AND INTERFERENCE CANCELLATION FOR SIGNAL PROCESSING Gagandeep Singh Lamba
8085889	US	09/19/2007	METHODS FOR MANAGING ALIGNMENT AND LATENCY IN INTERFERENCE CANCELLATION Anand P. Narayan
8179946	US	11/20/2008	SYSTEMS AND METHODS FOR CONTROL OF ADVANCED RECEIVERS Brian Lee Roberts
8218697	US	02/17/2010	ITERATIVE INTERFERENCE CANCELLATION FOR MIMO-OFDM RECEIVERS Tommy Guess

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
8064498	US	03/19/2010	INTERFERENCE CANCELLATION IN VARIABLE CODELENGTH SYSTEMS FOR MULTI-ACCESS COMMUNICATION Vijay Nagarajan
8300745	US	03/25/2010	ITERATIVE INTERFERENCE CANCELLATION USING MIXED FEEDBACK WEIGHTS AND STABILIZING STEP SIZES Tommy Guess
8218602	US	08/30/2010	Method and apparatus for selectively applying interference cancellation in spread spectrum systems Anand Narayan
12/871776	US	08/30/2010	Advanced Signal Processors for Interference Cancellation in Baseband Receivers Louis L. Scharf
8654689	US	09/28/2010	Advanced signal processors for interference cancellation in baseband receivers Michael L. Mccloud
8391338	US	10/29/2010	Methods for Estimation and Interference Cancellation for signal processing Gagandeep Singh Lamba

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
8121176	US	10/29/2010	Iterative interference canceler for wireless multiple-access systems with multiple receive antennas Tommy Guess
8090006	US	10/29/2010	Systems and methods for serial cancellation Anand P. Narayan
8121177	US	11/17/2010	Method and apparatus for interference suppression with efficient matrix inversion in a DS-CDMA system Anand P. Narayan
12/966931	US	12/13/2010	Systems and Methods for Parallel Signal Cancellation Anand P. Narayan, John K. Thomas, Eric S. Olson
12/966953	US	12/13/2010	Interference Suppression for CDMA Systems Michael L. Mccloud
8374299	US	03/30/2011	Serial cancellation receiver design for a coded signal processing engine Eric S. Olson
8462901	US	04/27/2011	Iterative Interference Suppression Using Mixed Feedback Weights and Stabilizing Step Sizes Tommy Guess

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
8457262	US	06/28/2011	Iterative Interference Suppression Using Mixed Feedback Weights and Stabilizing Step Sizes Tommy Guess
8457263	US	08/08/2011	Methods for estimation and interference suppression for signal processing Gagandeep Singh Lamba
8588349	US	10/05/2011	Interference cancellation in variable codelength systems for multi-access communication Vijay Nagarajan
13/314787	US	12/08/2011	Methods for managing alignment and latency in interference suppression Anand P. Narayan
8446975	US	02/13/2012	Iterative Interference Suppressor for Wireless Multiple-Access Systems with Multiple Receive Antennas Tommy Guess
8514910	US	05/02/2012	Systems and methods for control of receivers Brian Lee Roberts

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
13/896952	US	05/17/2013	Iterative interference suppressor for wireless multiple-access systems with multiple receive antennas Tommy Guess
13/908264	US	06/03/2013	Iterative interference suppression using mixed feedback weights and stabilizing step sizes Tommy Guess
13/908286	US	06/03/2013	Methods for estimation and interference suppression for signal processing Gagandeep Singh Lamba
13/913225	US	06/07/2013	Iterative interference suppression using mixed feedback weights and stabilizing step sizes Tommy Guess
13/970517	US	8/19/2013	SYSTEMS AND METHODS FOR CONTROL OF RECEIVERS Brian Lee Roberts
GB2331436	GB	08/22/1997	Rake receiver for spread spectrum signal demodulation Wolfgang Kober
6430216	US	07/07/2000	Rake receiver for spread spectrum signal demodulation Wolfgang Kober

Patent or Application No.	Country	Filing Date	Title of Patent and First Named Inventor
6947474	US	01/18/2001	Rake receiver for spread spectrum signal demodulation Wolfgang Kober
6788734	US	05/08/2002	Rake receiver for spread spectrum signal demodulation Wolfgang Kober
14/082,089	US	11/15/2013	Interference Cancellation in Variable Codelength Systems for Multi-Access Communication Vijay Nagarajan
IN250195	IN	9/25/2002	METHOD AND APPARATUS FOR IMPLEMENTING PROJECTIONS IN SIGNAL PROCESSING APPLICATIONS – John K. Thomas
14/108,333	US	12/16/2013	ADVANCED SIGNAL PROCESSORS FOR INTERFERENCE CANCELLATION IN BASEBAND RECEIVERS Michael L. McCloud

(b) all patents and patent applications (i) to which any of the Patents directly or indirectly claims priority, and/or (ii) for which any of the Patents directly or indirectly forms a basis for priority; provided, however, that this subsection (b) does not apply to the following patents and patent applications (the "***Excluded Assets***"): 60/024525, 60/056228, 60/056455, 60/087036, PCT/US1997/014783, AU43280/97, SG64001, 08/916884, PCT/US1998/017278, GB2343801, SG70795, 60/245792, GB2331436 , 6252535, 6430216, 6362760, 6380879, 6947474, 6549151, or 6788734;

(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); provided, however, that this subsection (c) does not apply to the Excluded Assets;

(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; provided, however, that this subsection (d) does not apply to the Excluded Assets;

(e) patentable inventions and invention disclosures, in each case of one or more of the named inventors, the initial disclosure in a patent application having occurred in any of the Patents and/or any item in the foregoing categories (b) through (d) which are subject matter capable of being reduced to a valid patent claim, such that Purchaser is hereby granted the right to apply for and all right, title and interest in any and all of the following: (i) future reissues, results of any reexamination, or any other post issuance review of the Patents and/or any item in the foregoing categories (b) through (d) , (ii) future claims resulting from any post grant proceedings on the Patents and/or any item in the foregoing categories (b) through (d), and/or (iii) future patent applications and patents in any or all jurisdictions that lawfully claim priority to any of the Patents and/or any item in the foregoing categories (b) through (d);

(f) 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 (e), 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;

(g) 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 and/or any item in any of the foregoing categories (b) through (f), 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

(h) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (b) through (g), except for royalties or other payments under or on account of the Patents which Assignor has the right to collect pursuant to licenses existing on the date hereof.

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.

Assignor will, at the reasonable request of Assignee, do all things 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, and/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.

IN WITNESS WHEREOF this Assignment of Patent Rights is executed at Sunnyvale, California on March 17, 2014.

ASSIGNOR:

Rambus Inc.

By: Laura Stark
Name: Laura Stark
Title: Senior Vice President
(Signature MUST be attested)

ATTESTATION OF SIGNATURE PURSUANT TO 28 U.S.C. § 1746

The undersigned witnessed the signature of Laura Stark to the above Assignment of Patent Rights on behalf of Rambus 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. Laura Stark is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on March 7, 2014 to execute the above Assignment of Patent Rights on behalf of Rambus Inc.

3. Laura Stark subscribed to the above Assignment of Patent Rights on behalf of Rambus 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 paragraphs immediately above are true and correct.

EXECUTED on March 7, 2014

Print Name: Al Navas