

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jeffery R. Parker</td> <td>03/07/2012</td> </tr> <tr> <td>Timothy A. McCollum</td> <td>03/07/2012</td> </tr> <tr> <td>Fumitomo Hide</td> <td>03/07/2012</td> </tr> <tr> <td>Alexey Titov</td> <td>03/07/2012</td> </tr> <tr> <td>Ian Hardcastle</td> <td>03/01/2012</td> </tr> </tbody> </table>		Name	Execution Date	Jeffery R. Parker	03/07/2012	Timothy A. McCollum	03/07/2012	Fumitomo Hide	03/07/2012	Alexey Titov	03/07/2012	Ian Hardcastle	03/01/2012
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Ian Hardcastle	03/01/2012												
RECEIVING PARTY DATA													
Name:	RAMBUS INC.												
Street Address:	1050 Enterprise Way												
Internal Address:	Suite 700												
City:	Sunnyvale												
State/Country:	CALIFORNIA												
Postal Code:	94089												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13421145</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13421145								
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Application Number:	13421145												
CORRESPONDENCE DATA													
Fax Number:	(216)621-6165												
Phone:	216-621-1113												
Email:	mwendolowski@rennerotto.com												
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>													
Correspondent Name:	RENNER, OTTO, BOISSELLE & SKLAR, LLP												
Address Line 1:	1621 Euclid Avenue												
Address Line 2:	19th Floor												
Address Line 4:	Cleveland, OHIO 44115												
ATTORNEY DOCKET NUMBER:	GL0LP0156US1												

OP \$40.00 13421145

NAME OF SUBMITTER:

Michael P. Wendolowski

Total Attachments: 8

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ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and pursuant to an obligation to Rambus Inc. and/or its affiliates to assign intellectual property, and pursuant to any other applicable agreements among Rambus Inc. and its affiliates, the person(s)

Jeffery R. Parker of Richfield, OH
Timothy A. McCollum of Avon Lake, OH
Fumitomo Hide of San Jose, CA
Alexey Titov of Sagamore Hills, OH
Ian Hardcastle of Sunnyvale, CA

(hereinafter referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and/or does hereby sell, assign, and transfer to **Rambus Inc.**, a Delaware corporation, having a place of business at **1050 Enterprise Way, Suite 700, Sunnyvale CA 94089** ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following **provisional application filed under 35 U.S.C. § 111(b)** ("APPLICATION") entitled "**LIGHTING ASSEMBLY WITH ADJUSTABLE LIGHT OUTPUT**", having:

 X United States Patent Application No. **61/454,218**, filed on **March 18, 2011**;

 which claims priority to U.S. Patent Application No. [Enter APPLICATION NUMBER] filed on [Enter DATE]; or

 Application number (_____), filed (_____), inserted by (_____) on (_____) [Where INVENTOR hereby authorizes and requests ASSIGNEE or its agents to insert here in each parentheses the application number and filing date when known, along with the signature and date of the person completing this section].

2. The entire worldwide right, title, and interest in and to: (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, utility model, design, divisional, continuation, continued prosecution, continuation-in-part, substitute, renewal, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world related to the SUBJECT MATTER; (d) all patents (including reissues, re-examinations, and extensions) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

As part of this Assignment, INVENTOR further agrees to do the following, when requested, and without further consideration: (1) execute all oaths, declarations, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT

MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

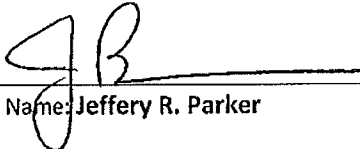

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

The terms and covenants of this Assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding upon INVENTOR, and INVENTOR's respective heirs, legal representatives and assigns.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Each Inventor: Please Sign and Date Below:

	<u>3-7-2012</u>
Inventor Name: <u>Jeffery R. Parker</u>	Date
State of <u>Ohio</u>)	
County of <u>Cuyahoga</u>)	
On <u>March 7, 2012</u> before me, <u>Therese A. Trivisonno</u> , Notary Public,	
personally appeared <u>Jeffery R. Parker</u> , who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the individual or the entity upon behalf of which the person acted, executed the instrument.	
I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing is true and correct.	
WITNESS my hand and official seal.	
Signature: <u>Therese A. Trivisonno</u>	(Seal)
	

Therese A. Trivisonno
Notary Public, State of Ohio
My Commission Expires Jan. 28, 2013

Timothy A. McCollum 3/7/2012
 Inventor Name: Timothy A. McCollum Date


State of Ohio)
 County of Cuyahoga)

On March 7, 2012 before me, THERESE A. TRIVISONNO, Notary Public,
 personally appeared Timothy A. McCollum, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the Instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: Therese A. Trivisonno (Seal)



THERESE A. TRIVISONNO
 Notary Public, State of Ohio, Cuy. Cty.
 My Commission Expires Jan. 22, 2013

 Inventor Name: Fumitomo Hide Date

State of California)
 County of Santa Clara)

On _____ before me, _____, Notary Public,
 personally appeared Fumitomo Hide, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the Instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Seal)

Alexey Titov 3-7-2012
 Inventor Name: **Alexey Titov** Date

State of Ohio)
 County of Cuyahoga)

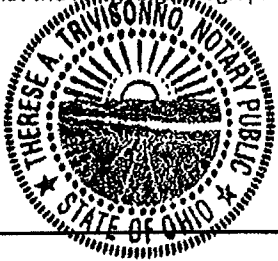
On March 7, 2012 before me, THERESE A. TRIVISONNO, Notary Public,
 personally appeared **Alexey Titov**, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: *THERESE A. TRIVISONNO* (Seal)

THERESE A. TRIVISONNO
 Notary Public, State of Ohio, Cuy. Cty
 My Commission Expires Jan. 22, 2014



 Inventor Name: **Ian Hardcastle** Date

State of California)
 County of Santa Clara)

On _____ before me, _____, Notary Public,
 personally appeared **Ian Hardcastle**, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Seal)

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Jeffery R. Parker of Richfield, OH
Timothy A. McCollum of Avon Lake, OH
Fumitomo Hlde of San Jose, CA
Alexey Titov of Sagamore Hills, OH
Ian Hardcastle of Sunnyvale, CA

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which claims priority to U.S. Patent Application No. [Enter APPLICATION NUMBER] filed on [Enter DATE]; or
Application number (_____), filed (_____), inserted by (_____) on (_____) [Where INVENTOR hereby authorizes and requests ASSIGNEE or its agents to insert here in each parentheses the application number and filing date when known, along with the signature and date of the person completing this section].

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This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Each Inventor: Please Sign and Date Below:

Inventor Name: Jeffery R. Parker		Date
State of Ohio)	
County of Cuyahoga)	
On _____ before me, _____, Notary Public,		
personally appeared Jeffery R. Parker , who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.		
I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.		
WITNESS my hand and official seal.		
Signature: _____		(Seal)

Inventor Name: Timothy A. McCollum Date _____

State of Ohio)
 County of Cuyahoga)

On _____ before me, _____, Notary Public,
 personally appeared **Timothy A. McCollum**, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Seal)

Fumitomo Hide Date March 7, 2012

Inventor Name: **Fumitomo Hide** Date _____


State of California)
 County of Santa Clara)

On 7 March 2012 before me, V. Jercha, Notary Public,
 personally appeared **Fumitomo Hide**, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: *V. Jercha* (Seal)



V. JERCHA
 COMM. #1860235
 Notary Public - California
 San Mateo County
 My Comm. Expires Aug. 6, 2013

Inventor Name: Alexey Titov Date _____

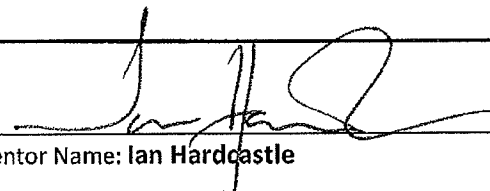
State of Ohio)
County of Cuyahoga)

On _____ before me, _____, Notary Public,
personally appeared **Alexey Titov**, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Ohio that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Seal)

 Date 1 March 2012

Inventor Name: Ian Hardcastle Date _____

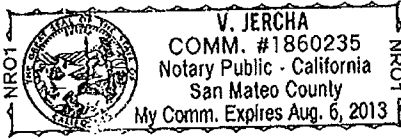
State of California)
County of Santa Clara)

On 1 Mar 2012 before me, V Jercha, Notary Public,
personally appeared **Ian Hardcastle**, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: V Jercha (Seal)



V. JERCHA
COMM. #1860235
Notary Public - California
San Mateo County
My Comm. Expires Aug. 6, 2013