501879123 04/05/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jeffery R Parker	03/07/2012
Timothy A McCollum	03/08/2012
Matthew R Wancata	03/08/2012
Fumitomo Hide	03/07/2012
Alexey Titov	03/07/2012
lan 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

Property Type	Number
Application Number:	13440210

CORRESPONDENCE DATA

 Fax Number:
 (216)621-6165

 Phone:
 216-621-1113

Email: lknochel@rennerotto.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: M. David Galin
Address Line 1: 1621 Euclid Ave.
Address Line 2: 19th Floor

Address Line 4: Cleveland, OHIO 44115

PATENT

REEL: 027996 FRAME: 0191

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ATTORNEY DOCKET NUMBER: GLOLP0163USA		
NAME OF SUBMITTER:	M. David Galin	
Total Attachments: 10 source=GLOLP0163US_AssignmentExecuted#page1.tif source=GLOLP0163US_AssignmentExecuted#page2.tif source=GLOLP0163US_AssignmentExecuted#page3.tif source=GLOLP0163US_AssignmentExecuted#page4.tif		
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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
Matthew R. Wancata of Strongsville, 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 self, 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 to having:	led under 35 U.S.C. § 111(b) ("A	PPLICATION") entitled "LIGH	TING ASSEMBLY",
X	United States Patent Application No. 61/486,096, filed on May 13, 2011;		
<u></u>	which claims priority to U.S. Pand NUMBER It filed on [Enter DAT	• •	APPLICATION
	Application number (on () on (and requests ASSIGNEE or its cation number and filing date	agents to insert here when known, along

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

Docket No.: GLOLP0163US

RA1022.Prov1.US

Page 1 of 5

App. No.: 61/486,096

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:

Eddit inventor; Please Sign <u>and Date</u> below.			
Inventor Name: Jeffery R. Parker	3-7-12 Date		
inventor Name. Seriery N. Farker			
State of Ohio) County of Cuyahoga)			
On 3-9-12 before me, IHERESE A	- TRIVISONNO , Notary Public,		
personally appeared Jeffery R. Parker, who proved to me whose name is subscribed to the within instrument and a his/her authorized capacity, and that by his/her signature of which the person acted, executed the instrument.	cknowledged to me that he/she executed the same in		
I certify under PENALTY OF PERJURY under the laws of th correct.	e State of Ohio that the regions dander is his true and		
WITNESS my hand and official seal.			
Signature: THERESE A. TRIVISONNO Notary Public, State of Ohio, Cuy, Cty. My Commission Expires Jan. 22, 2013	(Seal)		
THE MALIGUES AND LABOUR AND LABOU			

Docket No.: GLOLP0163US

RA1022.Prov1.US

Page 2 of 5

App. No.: 61/486,096

Inventor Name: Timothy A. McCollum Date
State of Ohio) County of Cuyahoga)
On 3-8-12 before me, HERESE A. Thivisonus, 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 following rates are is true and correct.
WITNESS my hand and official seal.
Signature: Music (Commus (Seal) THERESE A. TRIVISONNO Notary Public, State of Ohio, Cuy. Cty. My Commission Expires Jan. 22, 2013

Martine R. Wancata 3/5/2012 Date
State of Ohio) County of Cuyahoga)
On 3-8-12 before me, THAUSE A. HVISOMO, Notary Public,
personally appeared Matthew R. Wancata, 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 its agolyst busy applies true and correct.
WITNESS my hand and official seal.
Signature: Notary Public, State of Ohio, Cuy, Cty. My Commission Expires Jan. 22, 2013 (Seal)

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Page 3 of 5

App. No.: 61/486,096

Inventor Name: Fumitor	no Hide	Date	
State of California County of Santa Clara)		
On	before me,	, Notary Public,	
whose name is subscribed his/her authorized capacit	to the within instrument and	on the basis of satisfactory evidence to be the person acknowledged to me that he/she executed the same in the on the instrument the person, or the entity upon behalf	
I certify under PENALTY O and correct.	F PERJURY under the laws of th	ne State of California that the foregoing paragraph is true	
WITNESS my hand and off	icial seal.		
Signature:		(Seal)	
May Inventor Name: Alexey T	Ttov	3-7-20/2 Date	
State of Ohio County of Cuyahoga)		
on 3-7-12	_ before me, [HANGE A.	(Rivison no , 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 correct.	F PERJURY under the laws of th	ne State of Ohio that the foreign is true and	
WITNESS my hand and off	icial seal.	ES ES	
Signature: (hun (ÉRESE A. TRIVISONNO ubilo, State of Ohio, Cuy. Cty. nission Exotres. Jan. 22, 2013	(Seal)	

RA1022.Prov1.US Page 4 of 5

App. No.: 61/486,096

Inventor Name: Ian Hard	castle	Date
State of California County of Santa Clara)	
On	before me,	, Notary Public,
whose name is subscribed his/her authorized capacit	to the within instrument and	on the basis of satisfactory evidence to be the person acknowledged to me that he/she executed the same in e on the instrument the person, or the entity upon behalf
I certify under PENALTY O	F PERJURY under the laws of th	ne State of California that the foregoing paragraph is true
WITNESS my hand and off	icial seal.	
Signature:		(Seal)

RA1022.Prov1.US

Page 5 of 5

App. No.: 61/486,096

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Timothy A. McCollum of Avon Lake, OH
Matthew R. Wancata of Strongsville, OH
Fumitomo Hide of San Jose, CA
Alexey Titov of Sagamore Hills, OH
Ian Hardcastle of Sunnyvale, CA

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improvements ("SUBJECT MATTER") that are disclosed in the following provisional

application f having:	iled under 35 U.S.C. § 111(b) ("A	PPLICATION") entitled " LIG H	ITING ASSEMBLY",
X	United States Patent Application	on No. 61/486,096, filed on	May 13, 2011;
	which claims priority to U.S. Pand NUMBER] filed on [Enter DAT		APPLICATION
	Application number (), filed (),
	inserted by () on () [Where
	INVENTOR hereby authorizes and requests ASSIGNEE or its agents to insert here		
	in each parentheses the applic	ation 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.

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Docket No.: GLOLP0163US

RA1022.Prov1.US Page 1 of 5 App. No.: 61/486,096

PATENT

REEL: 027996 FRAME: 0198

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.

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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)			

Page 2 of 5

Docket No.: GLOLP0163US

RA1022.Prov1.US

App. No.: 61/486,096

PATENT

REEL: 027996 FRAME: 0199

Inventor Name: Timothy	A. McCollum	Date
State of Ohio County of Cuyahoga)	
On	before me,	, Notary Public,
person whose name is sul same in his/her authorize	bscribed to the within instru	ved to me on the basis of satisfactory evidence to be the iment and acknowledged to me that he/she executed the ner signature on the instrument the person, or the entity instrument.
I certify under PENALTY O correct.	F PERJURY under the laws o	of the State of Ohio that the foregoing paragraph is true and
WITNESS my hand and of	ficial seal.	
Signature:		_ (Seal)
<u>, , , , , , , , , , , , , , , , , , , </u>		
Inventor Name: Matthey	v R. Wancata	Date
State of Ohio County of Cuyahoga)	
On	before me,	, Notary Public,
person whose name is sub same in his/her authorize	scribed to the within instru	red to me on the basis of satisfactory evidence to be the iment and acknowledged to me that he/she executed the ner signature on the instrument the person, or the entity instrument.
I certify under PENALTY O correct.	F PERJURY under the laws o	f the State of Ohio that the foregoing paragraph is true and
WITNESS my hand and off	ficial seal.	
Signature:		_ (Seal)

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Page 3 of 5

App. No.: 61/486,096

			The state of the s
Miles	The state of the s		rch 7, 2012
Inventor Name: Fumito	mo Hide	Date	
State of California County of Santa Clara))		
on March 201	2 before me,	Jercha	, Notary Public,
whose name is subscribe	ed to the within instrum city, and that by his/her	ent and acknowledge signature on the instr	of satisfactory evidence to be the person d to me that he she executed the same in rument the person, or the entity upon behalf
I certify under PENALTY of and correct.	OF PERJURY under the I	aws of the State of Ca	lifornia that the foregoing paragraph is true
WITNESS my hand and o	è	NRO1	V. JERCHA COMM. #1860235 Notary Public - California San Mateo County
Signature:	CAUS	(Seal) <u>}</u>	My Comm. Expires Aug. 6, 2013
_			
Inventor Name: Alexey	Titov	Date	
Inventor Name: Alexey State of Ohio County of Cuyahoga	Titov } }	Date	
State of Ohio	Titov)) before me,	Date	, Notary Public,
State of Ohio County of Cuyahoga On personally appeared Alex whose name is subscribe) before me, xey Titov, who proved to d to the within instrum ity, and that by his/her	to me on the basis of s ent and acknowledge signature on the instr	, Notary Public, satisfactory evidence to be the person d to me that he/she executed the same in ument the person, or the entity upon behalf
State of Ohio County of Cuyahoga On personally appeared Alex whose name is subscribe his/her authorized capac of which the person acte) before me, xey Titov, who proved t d to the within instrum ity, and that by his/her d, executed the instrun	to me on the basis of s ent and acknowledged signature on the instr nent.	satisfactory evidence to be the person d to me that he/she executed the same in
State of Ohio County of Cuyahoga On personally appeared Alex whose name is subscribe his/her authorized capac of which the person acte I certify under PENALTY C) before me, xey Titov, who proved to the within instrum ity, and that by his/her d, executed the instrum OF PERJURY under the leads to the leads t	to me on the basis of s ent and acknowledged signature on the instr nent.	satisfactory evidence to be the person d to me that he/she executed the same in ument the person, or the entity upon behalf

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Page 4 of 5

App. No.: 61/486,096 **PATENT**

REEL: 027996 FRAME: 0201

nventor Name: Ian Hardcastle Date
State of California) County of Santa Clara)
on 1 Mar 2012 before me, V Jetcha, Notary Public,
personally appeared lan 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.
certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
VITNESS my hand and official seal.
ignature: (Seal) V. JERCHA COMM. #1860235 Z Notary Public · California Z San Mateo County My Comm. Expires Aug. 6, 2013

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Page 5 of 5

App. No.: 61/486,096 **PATENT**

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RECORDED: 04/05/2012