(Rev. 03/01)	U.S. Patent and Trademark Office	
· · · · · · · · · · · · · · · · · · ·	101966341_	
Tab settings ⇒ ⇒ ♥ ▼	<u> </u>	
		cord the attached original documents or copy thereof.
Name of conveying party(ies):		me and address of receiving party(ies)
Ngat M. Nguyen,	-02 Nar	me: Rambus Inc.
Kun-Yung K. Chang,	Inte	ernal Address:
Additional name(s) of conveying party(ies) attached?	Yes LXI No	
3. Nature of conveyance:		
Assignment		eet Address: 4440 El Camino Real
Security Agreement	e of Name	Bet Address. 4440 Et Odiffillo (Codi
• Other		
		y: Los Altos State: CA Zip: 94022
9/22/2001 and 9/27/200		y. 203 /1103 State. CA 21p. 94022
Execution Date: 8/23/2001 and 8/27/200	71 Addi	itional name(s) & address(es) attached? 📮 Yes 🔼 No
4. Application number(s) or patent number(s)	<b>)</b> :	DECEIVED
4. Application number(s) or patent number(s)  If this document is being filed together with	a new application, t	he execution date of the application is:
A. Patent Application No.(s)	В. !	Patent No.(s)
09/993,929		JAN 2 4 2002
	ا nal numbers attached?  [	Yes X No
5. Name and address of party to whom corre	spondence 6. Tota	al number of applications and patents involved:
concerning document should be mailed:	7.7	- C \$40.00
Name: Charles E. Shemwell	/. lota	al fee (37 CFR 3.41)\$_\$40.00
Internal Address:		Enclosed
		Authorized to be charged to deposit account
	e Do	posit account number:
Street Address: 998 East El Camino F		posit account number.
Street Address. 300 East El Galling I	50	1914
Suite 204		
City: Sunnyvale State: CA Zip:9	4087-7913 (Atta	ch duplicate copy of this page if paying by deposit account)
	SO NOT HOT THE	0000
9. Statement and signature.	OO NOT USE THIS S	SPACE
<u> </u>	ne foregoina informat	tion is true and correct and any attached copy
is a true copy of the original document.	2.2.2going informati	
Charles E. Shemwell	Charle	Edrel Dec. 24, 2001
Name of Person Signing	_	ature Date
Mail de almante de		attachments, and documents: 4
	be recorded with required oner of Patents & Trademarks	cover sheet information to: is, Box Assignments

Washington, D.C. 20231

d1 FC:581

Attorney's Docket No.: R1-P103 PATENT

## **ASSIGNMENT**

In consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, Nhat M. Nguyen and Kun-Yung K. Chang, the undersigned Assignor(s), believing to be the original, first and sole or joint inventor(s) of any and all new and useful improvements disclosed in the application for the United States patent entitled

## SELF-RESETTING PHASE LOCKED LOOP

hereby sell, assign, and transfer to <u>Rambus Inc.</u>, a <u>Delaware Corporation having a principal place of business at 4440 El Camino Real, Los Altos, California 94022</u>, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the same patent application

X which was filed with the United States Patent and Trademark Office on
November 16, 2001 and which was assigned Application Number 09/993,929.
which has been executed by the undersigned prior hereto or concurrently herewith on the dates indicated below.

The undersigned further sell, assign, and transfer to Assignee said application and all divisional applications, continuation applications, continuation applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications, utility models and the like that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application; and the right to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties or otherwise.

The undersigned further agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements

Atty. Docket No. R1-P103

PATENT REEL: 012519 FRAME: 0803 and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives.

The undersigned covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

The undersigned hereby authorize and request the Officials of the United States Patent and Trademark Office and any and all foreign Patent Offices to issue any and all Letters Patents, when granted, to said Assignee as the assignee of the entire right, title and interest in and to the same, for the sole use of said Assignee, its successors and assigns, to the full end of the term for which said Letters Patents may be granted.

The undersigned hereby grant to <u>Charles E. Shemwell (Reg. No. 40,171)</u>, located at <u>998 East El Camino Real, Suite 204, Sunnyvale, California 94087-7913</u>, the power to insert on this document any further identification necessary or desirable to comply with the rules of the United States Patent and Trademark Office for recordation of this Assignment.

Each Inventor/Assignor: Please Sign and Date Below:

Name: Nhat M. Nguyen			
) ss )			
I certify that I know/have satisfactory evidence that Nhat M. Nguyen is the person who appeared before me, and said person acknowledged that he or she signed this instrument and acknowledged it to be his or her free and voluntary act for the uses and purposes mentioned in the instrument.			
seal.			
Coronitation & 112 5783  Dietroy Putation - California  Service of Cara County  Constant Cons			

	$\Omega$		
12/19, 2001 Date	Name: Kun-Yung K. Chang		
State of California	)		
County of Santa Clara	) ss )		
I certify that I know/have satisfactory evidence that <u>Kun-Yung K. Chang</u> is the person who appeared before me, and said person acknowledged that he or she signed this instrument and acknowledged it to be his or her free and voluntary act for the uses and purposes mentioned in the instrument.			
WITNESS my hand and officia	l seal.		
Muhale St.	MICHIKO SITES Commission # 1223783 Notary Public - California Santa Clera County		
Date: December 19, 2	My Court Expires Oct 8, 2023 (		

**RECORDED: 01/24/2002** 

PATENT REEL: 012519 FRAME: 0805