Docket No.: RA-232

FORM PTO-1595 (Modified) (Rev. 03-01) OMB No. 0651-0027 (exp.5/31/2002) P08A/REV03	-15-6d IIIIIIIIII	6-2002	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
Tab settings → → ▼ To the Honorable Commiss	vioner of Patents and Trademarks	03630	inal documents or copy there of
Tab settings → → ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑		2. Name and address of receivance: Name: RAMBUS INC. Address: 4440 El Camino	iving party(ies):
Additional names(s) of conveying	party(ies)		
 3. Nature of conveyance: Assignment Security Agreement Other Execution Date: 23 January 	☐ Merger ☐ Change of Name	City: Los Altos Country: US	State/Prov.: CA ZIP: 94022
 Application number(s) or p If this document is being fill Patent Application No. 	atent numbers(s): ed together with a new application Filing date	Additional name(s) & address(es) n, the execution date of the applic B. Patent No.(s)	□ Yes ☒ No cation is:
10/020,921	19 December 2001 Additional numbers	☐ Yes ⊠ No	
 Name and address of party to whom correspondence concerning document should be mailed: 		6. Total number of application	s and patents involved:
Name: Stephen R. Whitt Registration No. 34,753 Address: 1215 Tottenham Court		7. Total fee (37 CFR 3.41):\$ 40.00 ■ Enclosed - Any excess or insufficiency should be credited or debited to deposit account □ Authorized to be charged to deposit account	
City: Reston	State/Prov.: VA	8. Deposit account number: 50-0763 (Attach duplicate copy of this pa	40.00 UP
Country: US	ZIP: 20194		
of the original document. Stephen R. Whitt	ge and belief, the foregoing inform	n R. White	04 February, 2002
Name of Person S	igning Total number of pages including	Signature cover sheet, attachments, and	Date Se sign

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments

PATENT

REEL: 012625 FRAME: 0394

Assignment of Rights, Title and Interest in Invention Docket No. (Multiple inventors; single assignee) RA-232 This is an Assignment of the following rights, title and interest: (check all that apply): United States of America rights, title and interest in the invention X Foreign rights, title and interest in the invention X United States Patent Application Serial No. 10/020,921 Date of Execution: Date of Filing: December 19, 2001 United States Provisional Patent Application Serial No. United States Patent No(s). International (PCT) Patent Application Serial No. Other (specify) Title of the Invention PUSH-PULL OUTPUT DRIVER Inventors (assignors) Address Name 4928 Scarlett Way, San Jose, CA 95111 Huy M. Nguyen 630 Celebration Court, San Jose, CA 95134 Benedict Lau Roxanne Vu 5816 Southview Drive, San Jose, CA 95138 Assignee Address Name RAMBUS INC 4440 El Camino Real Los Altos, CA 94022

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AS03A/REV01

Assignment of Rights, Title and Interest in Invention (Multiple inventors; single assignee)

Docket No. RA-232

Whereas, we, the above-identified Inventors, have invented certain new and useful improvements in the Invention identified above and described in the above-identified patent application(s) and/or patent(s) (hereinafter referred to as "Invention");

And, whereas we desire to assign our above-identified rights, title and interest in the Invention to the above-identified Assignee;

Now, this indenture witnesseth, that for good and valuable consideration, the receipt whereof is hereby acknowledged;

We hereby assign, sell and transfer our above-identified rights, title and interest in said Invention, said application(s) as identified above, including any divisions, continuations, and continuations-in-part thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted or have granted for said Invention, and in and to any and all reissues and reexaminations thereof, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to us with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, unto said Assignee;

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any United States Letters Patent which may issue for said Invention to said Assignee, as assignee of the whole right, title and interest thereto;

And we further agree to sign and execute all necessary and lawful future documents, including applications for foreign patents, for filing divisions, continuations and continuations-in-part of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid Invention, as the Assignee or its Designee(s) may from time to time require and prepare at its own expense.

Inventors' Signatures (if Notarization is desired, do not sign here and proceed to next page)

Name	Signature/Date
Huy M. Nguyen	
Benedict Lau	
Roxanne Vu	

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PATENT REEL: 012625 FRAME: 0396

Assignment of Rights, Title and Interest in Invention (Multiple inventors; single assignee)

Docket No. RA-232

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Nota	r17/	IfINH
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(Although notarization is not necessary, it will be considered prima facie evidence of execution pursuant to 35 U.S.C. 261.)

Executed this , in the year at LES Altos, CA. State of California County of Santa Clara Before me personally appeared Huy M. Nguyen who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to day of January execute the same this 23 rd , in the year 2002 otary Public) Executed this 23 day of January at LOS Altos, CA , in the year 2002 ignature of Inventor) State of California County of Santa Clara Before me personally appeared Benedict Lau who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to 23rd day of January , in the year 7202 execute the same this Executed this 23 day of January , in the year 2002 at LOS AltOS CA. (Signature of Inventor) State of California MICHIED SITES Commission # 1224783 County of Santa Clara Motory Putric - Cultomia ria Cirra County Before me personally appeared Roxanne Vu who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to execute the same this 23 day of Linuary, in the year 2002

Mihika

[Page 3 of 3]

PATENT REEL: 012625 FRAME: 0397