

01-11-2002

PP

Docket No. 47102/NJP/B600

Box Assignment Commissioner of Patents and Trademarks Washington, D.C. 20231 Post Office Box 7068 Pasadena, CA 91109-7068

Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof:

1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Hau Thien Tran, Kelly B. Cameron, Ba-Zhong Shen and Christopher R. Jones	Name: Broadcom Corporation
Additional name(s) of conveying party(ies) attached: NO	Street Address: 16215 Alton Parkway Irvine, California 92618
3. Name of conveyance:	
X Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other:	
Execution Date: October 5, 2001, October 9, 2001, and October 12, 2001	Additional name(s) & address(es) attached? NO
4. Application number(s) or patent number(s):	
If this document is being filed together with a new appis:	plication, the execution date of the application
A. Patent Application No.(s) 09/952,309	B. Patent No.(s)
Additional numbers attached? NO	
5. Please return the recorded document and address all	al numbers attached? NO
correspondence to:	6. Total number of applications and patents involved
CHRISTIE, PARKER & HALE, LLP	
P.O. Box 7068 Pasadena, CA 91109-7068	7. XI Total fee enclosed (37 CFR 3.41): \$40.00
Attention: Nicholas J. Pauley	8. Any deficiency or overpayment of fees should be charged or credited to Deposit Account No. 03-1728 , except for payment of issue fees required under 37 CFR § 1.18. Please show our docket
10. □ Explanatory letter is enclosed.	number with any credit or charge to our Deposit Account.
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Date: October 31, 2001 By	
	Name: Nicholas J. Pauley / 626/795-9900
HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE U.S. POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO: ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231 ON	
DATE SIGNATURE	Total number of pages including cover sheet, attachments, and document:
10/2002 DBYRNE 00000124 09952309	

PATENT REEL: 012431 FRAME: 0347

ASSIGNMENT

I, one of the persons named below, hereby state and agree as follows:

I have invented certain new and useful improvements disclosed in an application for United States Letters Patent entitled METHOD AND APPRATUS FOR PERFORMING CALCULATIONS FOR FORWARD (ALPHA) AND REVERSE (BETA) METRICS IN A MAP DECODER, Application No. 09/952,309, filed September 12, 2001 and with claim to the priority of United States Provisional Application No. 60/232,053, filed September 12, 2000; and 60/232,288, filed September 12, 2000;

AND BROADCOM CORPORATION, a California corporation, having a place of business at 16215 Alton Parkway, Irvine, California 92618 (hereafter, together with any successors, legal representatives or assigns thereof, called "ASSIGNEE") wants to acquire the entire right, title and interest in and to said improvements and application.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned, transferred and set over, and do hereby sell, assign, transfer and set over to ASSIGNEE the entire right, title and interest in and to said improvements, and said application and all divisions and continuations thereof, and all United States Letters Patents which may be granted thereon and all reissues, reexaminations and extensions thereof, and all priority rights under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said improvements in any foreign countries, and all patents (including all continuations, divisions, extensions, renewals, substitutes, and reissues thereof) granted for said improvements in any foreign countries; and I hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents on applications as aforesaid, to issue all patents for said improvements to ASSIGNEE in accordance with the terms of this Assignment;

AND I HEREBY covenant that I have full right to convey the entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith;

AND I HEREBY further covenant and agree that I will communicate to ASSIGNEE any facts known to me respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute and reissue applications, make all rightful oaths and generally do everything possible to aid ASSIGNEE to obtain and enforce proper patent protection for said improvements in all countries.

Date: 10/5/01 Hau Thien Tran

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PATENT REEL: 012431 FRAME: 0348

ASSIGNMENT Docket No. 47102/NJP/B600

Date: <u>|c/5/0}</u>

Date: 10/12/01

Date: 16/17/61

RECORDED: 01/04/2002

NJP/clc CLC PAS379086.1-*-10/4/01 5:16 PM Kelly B. Cameron

Ba-Zhong Shen

Christopher R. Jones