05-11-2005



U.S. DEPARTMENT OF COMMENCE

(Rev. 03/01) 102	2999390 U.S. Patent and Trademark Office			
OMB No. 0651-0027 (exp. 5/31/2002)	-~ -			
Tab settings	<b>▼ ▼ ▼ ▼</b>			
To the Honorable Commissioner of Patents and Tradema	rks: Please record the attached original documents or copy thereof:			
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)			
Stephen P. Boyd	Name: The Board of Trustees for the Leland Stanford			
Additional name(s) of conveying party(ies) attached?  Yes X No				
3. Nature of conveyance:	1705 El Camino Real			
☐ Assignment ☐ Merger	Palo Alto, CA 94306-1106			
☐ Security Agreement ☐ Change of Nam	ne			
Other Resubmission of Assignment to include Coversh	<u>neet</u>			
Execution Date: October 26, 2004	Additional name(s) & address(es) attached? ☐ Yes ☒ No			
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is:				
A. Patent Application No.(s) 10/978,497 filed	B. Patent No.(s)			
November 1, 2004				
Additional numb	ers attached?  Yes  No			
5. Name and address of party to whom correspondence	6. Total number of applications and patents involved: 1			
concerning documents should be mailed:	7. Total fee (37 CFR 3.41) <u>Previously Submitted</u> Enclosed			
Name: Steven B. Phillips	_ ·			
Internal Address: Moore & Van Allen PLLC	Authorized to charge deposit account any shortage or credit overpayment			
	8. Deposit account number:			
	12.4265			
Street Address: 430 Davis Drive Suite 500	13-4365			
C) N ( ) (1) (2) (2) (2) (2) (2)	8. Deposit account number:			
City: Morrisville State: NC Zip: 27560-6832	USE THIS SPACE			
39. Signature.				
Steven B. Phillips	Bon'			
Name of Person Signing	Signature May 6, 2005 Date			
Total number of pages including cover sheet, attachments, and documents: 3				
Mail documents to be recorded with required cover sheet information to:				

Mail Stop: Assignments, Commissioner for Patents, P.O. Box 1450

Alexandria, VA 22313-1450

7/ - 7 - 0 <b>7</b> 1835  Under the Paperwork Reduction 10287762	otont o	Approved for use through 07/31/2006. OMB 0651-0032 and Trademark Office; U.S. DEPARTMENT OF COMMERCE		
FEE TRANSMITTAL  for FY 2004	ectionection	of information unless it displays a valid OMB control number.		
္ဖ FEE TRANSMITTAL		Complete if Known		
	Application Number			
<b>∮</b> □ for FY 2004	Filing Date	<del></del>		
1 d 1011 1 2004	First Named Inventor	Yang Xu /		
Effective 10/01/2003. Patent fees are subject to annual revision.	Examiner Name			
☐ Applicant claims small entity status. See 37 CFR 1.27	Art Unit			
TOTAL AMOUNT OF PAYMENT (\$) 1,294.00	Attorney Docket No.	014789-000002		
METHOD OF PAYMENT (check all that apply)	FE	EE CALCULATION (continued)		
☑ Check ☐ Credit Card ☐ Money ☐ Other ☐ None	3. ADDITIONAL FEES			
Order ☑ Deposit Account:	1			
Deposit	Large Entity   Small Entity			
Account 13-4365	Fee Fee Fee Fee			
Number Deposit	Code (\$) Code (\$)	Fee Description Fee Paid		
Account Moore & Van Allen PLLC.	1051 130 2051 65	Surcharge – late filing fee or oath		
Name  The Director is authorized to: (check all that apply)  ☐ Charge fee(s) indicated below ☐ Credit any overpayments	1052 50 2052 25	Surcharge – late provisional filing fee or cover sheet		
	1053 130 1053 130	Non-English specification		
□ Charge any additional fee(s) or any underpayment of fee(s)	1812 2,520 1812 2,520			
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1804 920* 1804 920*	Requesting publication of SIR prior to Examination action		
FEE CALCULATION	1805 1,840* 1805 1,840	P Requesting publication of SIR after Examiner action		
1. BASIC FILING FEE	1251 110 2251 55	Extension for reply within first month		
Large Entity Small Entity	1252 420 2252 210	Extension for reply within second month		
Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$)	1253 950 2253 475	Extension for reply within third month		
1001 790 2001 395 Utility filing fee 790.00	1254 1,480 2254 740	Extension for reply within fourth month		
1002 350 2002 175 Design filing fee	1255 2,010 2255 1,005			
1003 550 2003 275 Plant filing fee	1401 330 2401 165	Notice of Appeal		
1004 790 2004 395 Reissue filing fee	1402 330 2402 165	Filing a brief in support of an appeal		
1005 160 2005 80 Provisional filing fee	1403 290 2403 145	Request for oral hearing		
SUBTOTAL (1) (\$) 790.00	1451 1,510 1451 1,510	• / • • • • • • • • • • • • • • • • • •		
0001017LL (1) (4) 700.00	1452 110 2452 55 1453 1,330 2453 665	Petition to revive – unavoidable Petition to revive ≠ unintentional		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1453 1,330 2453 665 1501 1,330 2501 665	Utility issue fee (or reissue)		
Fee from	1502 480 2502 240	Design issue fee		
Extra Claims below Fee Paid	1502 460 2502 240 1503 640 2503 320	Plant issue fee		
Total Claims 36 -20**= 16 x 18 = 288.00	1406 130 1460 130	Petitions to the Commissioner		
Indep. Claims 5 -3** = 2 x 88 = 176.00	1807 50 1807 50	Processing fee under 37 CFR 1.17(q)		
Multiple Dependent	1806 180 1806 180	Submission of Information Disclosure Stmt		
Large Entity Small Entity	8021 40 8021 40	Recording each patent assignment per		
Fee Fee Fee <u>Fee Description</u>		property (times number of properties) 40.00		
Code (\$) Code (\$)	1809 770 2809 385.	Filing a submission after final rejection (37 CFR § 1.129(a))		
1202 18 2202 9 Claims in excess of 20	1810 770 2810 385	(37 CFR § 1.129(a))  For each additional invention to be		
1201 88 2201 44 Independent claims in excess of 3	1010 110	examined (37 CFR § 1.129(b))		
1203 300 2203 150 Multiple dependent claim, if not paid	1801 790 2801 395	Request for Continued Examination (RCE)		
1204 88 2204 44 ** Reissue independent claims over original patent	1802 900 1802 900	Request for expedited examination		
1205 18 2205 9 ** Reissue claims in excess of 20	i '	of a design application		
and over original patent	Other fee (specify)			
SUBTOTAL (2)(5) 464.00	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00			
**or number previously paid if greater: For Reissues, see above	<u> </u>			

SUBMITTED BY				Complete (If ap	plicable)	
Name (Print/Type)	Steven B. Phillips		Registration No. (Attorney/Agent)	37.911	Telephone	919-286-8000
Signature	6	3	Ma		Date	11/01/2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. provide credit card information WARNING: Information on this form may become public. Credit card information should not be included on this form. provide credit card information and authorization on PTO-2038. This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**PATENT** 

REEL: 016534 FRAME: 0890

no cover sh 11/03/2004 AADOFUI 00000035 10978497 04 FC:8021 40

## ASSIGNMENT OF INVENTION

WHEREAS, I, Stephen P. Boyd, resid	ling at 663 San Juan Street, Stanford, CA			
94305 have invented certain new and useful i	mprovements for a OPTIMIZATION AND			
DESIGN METHOD FOR CONFIGURABLE	E ANALOG CIRCUITS AND DEVICES for			
which I have made application for Letters Patent of the United States, and I hereby				
authorize and request my attorney, Steven B. Phillips, of Moore & Van Allen, PLLC,				
2200 West Main Street, Suite 800, Durham, I	N.C. 27705 to insert here in parentheses			
(Application number	, filed)			
the filing date and application number of said application when known;				

AND WHEREAS, The Board of Trustees for the Leland Stanford Junior University, a not-for-profit organization, and having a place of business at 1705 El Camino Real, Palo Alto, CA 94306-1106, hereinafter called the "Assignee," desires to acquire all right, title and interest in and to said invention and patent application within the United States and its territorial possessions and all foreign countries, and any United States or foreign Letters Patent that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, and with the intention of being legally bound hereby, I confirm that I have sold, assigned and transferred, and do hereby sell, assign and transfer to said Assignee the entire right, title and interest in and to our invention and patent application within the United States of America and its territorial possessions and all foreign countries, and in and to any Letters Patent of the United States and all foreign countries that may be granted therefor, including all divisions, continuations, continuations-in-part, substitutes, patents of addition, reissues, reexaminations, renewals and extensions thereof, and the right to apply for Letters Patent in foreign countries with full benefit of such priorities as may now or hereafter be granted to me by local laws or by treaty, including any international convention for the protection of industrial property, together with the right to extend the protection of said United States Letters Patent to the various territorial possessions now owned or which may be hereafter acquired by the United States of America, all said rights to be held and enjoyed by the Assignee for its use and benefit and for the use and benefit of its successors or assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made. And we do hereby request and authorize 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 said Letters Patent, when granted, in accordance with the terms of this assignment.

We further covenant and agree with the Assignee that we have full and unencumbered title to the invention and patent application herein assigned, which title we warrant unto the Assignee, and we further agree that, when requested, we will, without demanding any

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PATENT REEL: 016534 FRAME: 0891 further consideration therefor but at the expense of Assignee, do all lawful and just acts, including the execution and acknowledgement of instruments, that may be or become necessary for obtaining, sustaining or reissuing United States or foreign Letters Patent for the said invention and patent application, and for maintaining and perfecting the Assignee's right to said invention, patent application and Letters Patent particularly in cases of interference and litigation.

IN WITNESS WHEREOF, I, said inventor, have executed this Assignment under seal.

8 P. X

Stephen P. Boyd

10/26/04

STATE OF <u>California</u>
COUNTY OF <u>Sonta (br.)</u>

Before me personally appeared the above-named Stephen P. Boyd, on this the 26th day of October, 2004 to me known and known to be the inventor named and acknowledged that he executed the foregoing instrument on his behalf and pursuant to authority duly received.

(Seal)

KELLY S. YILMAZ COMM. #1408076 lotary Public-California ANTA CLARA COUNTY ly Comm. Exp. Mar 29, 2007

My Commission Expires 3-29-2007



## UNITED STATES PATENT AND TRADEMARK OFFICE

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

APRIL 26, 2005

PTAS

\*102877621A\*

MOORE & VAN ALLEN PLLC P.O. BOX 13706 RESEARCH TRIANGLE PARK, NC 27709

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DOCUMENT ID NO.: 102877621

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TARA WASHINGTON, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

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RECORDED: 11/01/2004 REEL: 016534 FRAME: 0894