06-04-2001 FORM PTO-1619A U.S. Department of Commerce Patent and Trademark Office Expires 06/30/99 OMB 0651-0027 **PATENT** 101738530 **RECORDATION FORM COVER SHEET** PATENTS ONLY TO: The Commiss ints and Trademarks: Please record the attached original document(s) or copy(ies) Submission Type Conveyance Type X X Assignment New Security Agreement Resubmission (Non-Recordation) License Change of Name Document ID# Correction of PTO Error Merger Other Reel# Frame # U.S. Government **Corrective Document** (For Use ONLY by U.S. Government Agencies) Reel # Frame # Departmental File Secret File Mark if additional names of conveying parties attached Execution Date Month Day Year Conveying Party(ies) Name (line 1) Kevin M. Harer March 15, 2001 Name (line 2) Execution Date Month Day Year Second Party Pei-Hsin HO March 15, 2001 Name (line 1) Name (line 2) Receiving Party Mark if additional names of receiving parties attached If document to be recorded Name (line 1) Synopsys, Inc. is an assignment and the receiving party is not domiciled in the United Name (line 2) States, an appointment of a domestic representative is attached. Address (line 1) 154 Crane Meadow Road, Suite 300 (Designation must be a separate document from Address (line 2) Assignment.) Address (line 3) Marlboro MA 01752 State/Country Domestic Representative Name and Address Enter for the first Receiving Party only. Name Address (line 1) Address (line 2) Address (line 3) Address (line 4) 00000055 09760063 05/29/2001 MABDI1 FOR OFFICE USE ONLY 40.00 OP 02 FC:581

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FORM PTC Expires 06/30/99 OMB 0651-0027	D-1619B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT		
Correspond	ent Name and Address	Area Code and Telephone Number	(212) 944-1515		
Name	Matthew J. Marquardt				
Address (line 1)	Brown Raysman Millstein Felde	er & Steiner LLP			
Address (line 2)	120 West 45th Street				
Address (line 3)	New York, New York 10036				
Address (line 4)					
Pages	Enter the total number of pa including any attachments.	ges of the attached conveyance docume	ent #		
• -	Number(s) or Patent Nur	nber(s) Mark if ad	ditional numbers attached		
	ent Application Number(s)	, and the second se	Number(s)		
09/760,063			Number(s)		
If this document is being filed together with a <u>new</u> Patent Application, enter the date the patent application was <u>Month Day Year</u> signed by the first named executing inventor.					
Patent Coop	eration Treaty (PCT)	PCT PCT	РСТ		
<u>only</u>	er PCT application number if a U.S. Application Numbe		PCT		
has not been assigned. Number of Properties Enter the total number of properties involved. #					
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Fee Amount	Fee Amount	for Properties Listed (37 CFR 3.41): \$	40		
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(Enter for payment by deposit account or if additional fees can be charged to the account.) Deposit Account Number: # 02-4270					
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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. Charges to deposit account are authorized, as indicated herein.					
Matthew J. I	Marquardt, Reg. No. 40,997	application	EZ MAY ZOUI		
Name	of Person Signing	Signature	Date		

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FORM PTO-16 Expires 06/30/99 OMB 0651-0027		S. Department of Commerce stent and Trademark Office		
Conveying Party(iss) FMARY OF Mark if additional names of conveying parties attached				
Enter additional Co	mark if additional frames of conveying parties attached	Execution Date Month Day Year		
Name (line 1)	obert F. Damiano	March 15, 2001		
Name (line 2)		Execution Date		
Name (line 1)		Month Day Year		
Name (line 2)		Execution Date		
Name (line 1)		Month Day Year		
Name (line 2)				
Receiving Par	rty(ies) Mark if additional names of receiving partie	s attached		
Enter additional R	eceiving Party(ies)			
Name (line 1)		If document to be recorded is an assignment and the receiving party is not		
Name (line 2)		domiciled in the United States, an appointment		
Address (line 1)		of a domestic representative is attached. (Designation must be a separate		
Address (line 2)		document from Assignment.)		
Address (line 3)	City State/Country Zip Cod	le		
Name (line 1)		If document to be recorded is an assignment and the		
Name (line 2)		receiving party is not domiciled in the United States, an appointment of a		
Address (line 1)		domestic representative is attached. (Designation must be a separate document from		
Address (line 2)		Assignment.)		
Address (line 3)	City State/Country Zip C	ode		
Application Number(s) or Patent Number(s) Mark if additional numbers attached Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).				
	tent Application Number(s) Patent Numb			

ASSIGNMENT

WHEREAS, I Robert F. Damiano, a citizen of United States of America, residing at 2650 Lookout Court, Lake Oswego, OR 97034, have invented one or more inventions (hereinafter referred to as "said invention(s)") disclosed in an application for Letters Patent of the United States titled SIMULATION-BASED FUNCTIONAL VERIFICATION OF MICROCIRCUIT DESIGNS (hereinafter referred to as "said application"), said application having been filed on January 12, 2001 and assigned application Serial No. 09/760,063.

WHEREAS, Synopsys, Inc. (hereinafter together with its successors and assigns referred to as "the Assignee"), a Delaware corporation, having a place of business at 154 Crane Meadow Road, Suite 300, Marlboro, MA 01752 is desirous of obtaining all right, title and interest in, to and under said invention(s) and said application; and

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which I hereby acknowledge, I have sold, assigned, transferred and set over, and by these presents hereby sell, assign, transfer and set over to the Assignee all right, title and interest in, to and under said invention(s) and said application, including the right to apply for any Letters Patent of the United States of America and in any and all foreign countries on said invention(s), and any and all other applications for Letters Patent on said invention(s), in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-inpart and convention applications based in whole or in part upon said invention(s) or upon said application, and any and all Letters Patent which may issue thereon in the United States and foreign countries, and any and all reissues, extensions, renewals, divisions, continuations or continuations-in-part of Letters Patent granted for said invention(s) or upon said applications, to the full term or terms for which said Letters Patent may be issued, and every priority right that is or may be predicated upon or arise from said invention(s), said application and said Letters Patent, the same to be held and enjoyed by the Assignee for its own use and benefit fully and entirely as if the same would have been held and enjoyed by me had this Assignment not been made. I hereby authorize the Assignee to file patent applications in any and all countries on any or all of said invention(s) in my name, or in its name, or otherwise as the Assignee may deem advisable, under the International Convention or otherwise.

I hereby authorize the Commissioner of Patents and Trademarks of the United States, and any official of any other country empowered to issue patents, to record this Assignment, and to issue or transfer all said Letters Patent on said invention(s) to the Assignee as owner of all right, title and interest therein, or otherwise as the Assignee may direct, in accordance with the terms of this Assignment.

I hereby represent and warrant that I have the full right to convey the entire right and interest herein assigned, that there are no rights or interests outstanding inconsistent with the rights and interests granted herein, and that I will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interests granted herein.

Page 1 of 2

BRMFS1 236057v1

I hereby covenant and agree that I will, upon request of the Assignee, communicate to the Assignee any facts known to me relating to said invention(s) and the history thereof, testify in any legal proceeding, execute all lawful papers including without limitation all divisional, continuing and reissue applications and all rightful oaths and declarations, and generally do all further acts which may be deemed necessary by the Assignee to obtain and enforce proper patent protection for said invention(s) in all countries.

IN TESTIMONY WHEREOF, I have executed this document on the date indicated below.

Date: 3/5/0/

(Signature) Robert F. Damiano

country of Washington) ss



On this <u>15</u> day of <u>March</u>, 2001, before me came Robert F. Damiano, to me known and known to me to be the individual described in, and who executed the foregoing instrument, and he/she has acknowledged to me that he/she has executed the same.

99685.1

ASSIGNMENT

WHEREAS, I Kevin M. Harer, a citizen of United States of America, residing at 9715 SW 169th Place, Beaverton, OR 97007, have invented one or more inventions (hereinafter referred to as "said invention(s)") disclosed in an application for Letters Patent of the United States titled SIMULATION-BASED FUNCTIONAL VERIFICATION OF MICROCIRCUIT DESIGNS (hereinafter referred to as "said application"), said application having been filed on January 12, 2001 and assigned application Serial No. 09/760,063.

WHEREAS, Synopsys, Inc. (hereinafter together with its successors and assigns referred to as "the Assignee"), a Delaware corporation, having a place of business at 154 Crane Meadow Road, Suite 300, Marlboro, MA 01752 is desirous of obtaining all right, title and interest in, to and under said invention(s) and said application; and

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which I hereby acknowledge, I have sold, assigned, transferred and set over, and by these presents hereby sell, assign, transfer and set over to the Assignee all right, title and interest in, to and under said invention(s) and said application, including the right to apply for any Letters Patent of the United States of America and in any and all foreign countries on said invention(s), and any and all other applications for Letters Patent on said invention(s), in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-inpart and convention applications based in whole or in part upon said invention(s) or upon said application, and any and all Letters Patent which may issue thereon in the United States and foreign countries, and any and all reissues, extensions, renewals, divisions, continuations or continuations-in-part of Letters Patent granted for said invention(s) or upon said applications, to the full term or terms for which said Letters Patent may be issued, and every priority right that is or may be predicated upon or arise from said invention(s), said application and said Letters Patent, the same to be held and enjoyed by the Assignee for its own use and benefit fully and entirely as if the same would have been held and enjoyed by me had this Assignment not been made. I hereby authorize the Assignee to file patent applications in any and all countries on any or all of said invention(s) in my name, or in its name, or otherwise as the Assignee may deem advisable, under the International Convention or otherwise.

I hereby authorize the Commissioner of Patents and Trademarks of the United States, and any official of any other country empowered to issue patents, to record this Assignment, and to issue or transfer all said Letters Patent on said invention(s) to the Assignee as owner of all right, title and interest therein, or otherwise as the Assignee may direct, in accordance with the terms of this Assignment.

I hereby represent and warrant that I have the full right to convey the entire right and interest herein assigned, that there are no rights or interests outstanding inconsistent with the rights and interests granted herein, and that I will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interests granted herein.

Page 1 of 2

BRMFS1 236053v1

I hereby covenant and agree that I will, upon request of the Assignee, communicate to the Assignee any facts known to me relating to said invention(s) and the history thereof, testify in any legal proceeding, execute all lawful papers including without limitation all divisional, continuing and reissue applications and all rightful oaths and declarations, and generally do all further acts which may be deemed necessary by the Assignee to obtain and enforce proper patent protection for said invention(s) in all countries.

IN TESTIMONY WHEREOF, I have executed this document on the date indicated below.

SS.:

(Signature) Kevin Harer

M. KMH

county of Washington



On this 15 day of ______, 2001, before me came Kevin J. Harer, to me known and known to me to be the individual described in, and who executed the foregoing instrument, and he/she has acknowledged to me that he/she has executed the same.

99685.1

ASSIGNMENT PH.

TAIWAN, with permanent residency
WHEREAS, I Pei-Hsin Ho, a citizen of United States of America, residing at United

14047 NW Meadowridge Dr., Portland, OR 97229, have invented one or more inventions

States of

(hereinafter referred to as "said invention(s)") disclosed in an application for Letters Patent of the America,
United States titled SIMULATION-BASED FUNCTIONAL VERIFICATION OF

WHEREAS, Synopsys, Inc. (hereinafter together with its successors and assigns referred to as "the Assignee"), a Delaware corporation, having a place of business at 154 Crane Meadow Road, Suite 300, Marlboro, MA 01752 is desirous of obtaining all right, title and interest in, to and under said invention(s) and said application; and

MICROCIRCUIT DESIGNS (hereinafter referred to as "said application"), said application

having been filed on January 12, 2001 and assigned application Serial No. 09/760,063.

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which I hereby acknowledge, I have sold, assigned, transferred and set over, and by these presents hereby sell, assign, transfer and set over to the Assignee all right, title and interest in, to and under said invention(s) and said application, including the right to apply for any Letters Patent of the United States of America and in any and all foreign countries on said invention(s), and any and all other applications for Letters Patent on said invention(s), in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-inpart and convention applications based in whole or in part upon said invention(s) or upon said application, and any and all Letters Patent which may issue thereon in the United States and foreign countries, and any and all reissues, extensions, renewals, divisions, continuations or continuations-in-part of Letters Patent granted for said invention(s) or upon said applications, to the full term or terms for which said Letters Patent may be issued, and every priority right that is or may be predicated upon or arise from said invention(s), said application and said Letters Patent, the same to be held and enjoyed by the Assignee for its own use and benefit fully and entirely as if the same would have been held and enjoyed by me had this Assignment not been made. I hereby authorize the Assignee to file patent applications in any and all countries on any or all of said invention(s) in my name, or in its name, or otherwise as the Assignee may deem advisable, under the International Convention or otherwise.

I hereby authorize the Commissioner of Patents and Trademarks of the United States, and any official of any other country empowered to issue patents, to record this Assignment, and to issue or transfer all said Letters Patent on said invention(s) to the Assignee as owner of all right, title and interest therein, or otherwise as the Assignee may direct, in accordance with the terms of this Assignment.

I hereby represent and warrant that I have the full right to convey the entire right and interest herein assigned, that there are no rights or interests outstanding inconsistent with the rights and interests granted herein, and that I will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interests granted herein.

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I hereby covenant and agree that I will, upon request of the Assignee, communicate to the Assignee any facts known to me relating to said invention(s) and the history thereof, testify in any legal proceeding, execute all lawful papers including without limitation all divisional, continuing and reissue applications and all rightful oaths and declarations, and generally do all further acts which may be deemed necessary by the Assignee to obtain and enforce proper patent protection for said invention(s) in all countries.

IN TESTIMONY WHEREOF, I have executed this document on the date indicated below.

Date: March 15, 200 (

(Signature) Pei-Hsin Ho



On this <u>15</u> day of <u>March</u>, 2001, before me came Pei-Hsin Ho, to me known and known to me to be the individual described in, and who executed the foregoing instrument, and he/she has acknowledged to me that he/she has executed the same.

99685.1

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RECORDED: 05/25/2001