

07-07-2006

Attorney Docket No. SNPS-0938

FORM PTO-1595

1-31-92

PA 103270186

, T U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

To the Assistant Commissioner for Patents and Trademarks: Please record the attached original documents or copy thereof.					
1. Name of conveying party(ies): Jensheng Huang, Chun-Chieh Kuo, Lawrence S. Melvin III  Additional name(s) of conveying party(ies) attached? [ ] Yes [X] No  3. Nature of conveyance:  [X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [ ] Other  Execution Date: 05 June 2006, 13 June 2006, 15 June 2006	2. Name and address of receiving party(ies):  Name:. Synopsys, Inc. Street Address: 700 E. Middlefield Rd. City: State: Zip: Mountain View, CA 94043-4033  Additional name(s) & address(es) attached?  [ ] Yes [X] 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: 15 June 2006  A. Patent Application No.(s): 11/443,715  B. Patent No.(s):  Additional numbers attached? [] Yes [X] No					
<ul> <li>Name and address of party to whom correspondence concerning document should be mailed:</li> <li>Name: A. Richard Park Park, Vaughan &amp; Fleming LLP 2820 Fifth Street Davis, CA 95616</li> <li>Attorney Docket No.: SNPS-0938</li> </ul>	Total number of applications and patents involved: [1]      Total fee (37 CFR 3.41)				
DO NOT USE THIS SPACE					
9. Statement and signature.  To the best of my knowledge and belief, the foregoing information the original document.  A. Richard Park Name of Person Signing  Total number of pages including cover sheet, attachments and document: [7]	28 June 2006 Date				

## CORPORATE ASSIGNMENT

WHEREAS, the undersigned,

Jensheng Huang Chun-Chieh Kuo Lawrence S. Melvin III 2616 Heritage Park Drive, San Jose, CA 95132 #2 LN139 Chung-Cheng Rd, Hsinchu 300, TAIWAN 2673 NE Lindsey Drive, Hillsboro, OR 97124

hereinafter termed "Inventor(s)", have invented certain new and useful improvements in

METHOD AND APPARATUS FOR DETERMINING AN ACCURATE PHOTOLITHOGRAPHY PROCESS MODEL

and have		declaration or oati	h for an applica	tion for a Uni	ted States par	ent disclosinį	g and identifying the	<u>,</u>
	On the	_ day of			_, 20;			
	Or							
<u>X</u>	_Said applicati	ion having Applic	ation Number_	11/443,715	and filed on_	31 May 200	<u>6;</u> and	
entire r embodi collecti	field Road, M right, title and iments of the invely hereinafte	ountain View, CA interest in and to nvention, heretofo	A 94043-4033, (said application ore conceived, ravention), and	Thereinafter te and the inver- made or disco in and to any	rmed "Assign ntion disclose vered jointly and all paten	nee"), is desined therein, and or severally less, inventor's	by said Inventor(s) ( certificates and other	e (all
to have		REFORE, in const in full from said	~	od and valuab	e considerati	on acknowled	dged by said Invento	r(s)
and into			•		•	_	ee the entire right, ti or foreign patents or	

- 1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.
- 2. Said Inventor(s) hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said

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PATENT REEL: 018058 FRAME: 0434 invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

- 3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.
- 4. Said Inventor(s) hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below.

Jensheng Huang

00/05/2006

Date

DOROTHY L. LEVIN
Commission # 1557671
Notary Public - California
Santa Clara County
My Comm. Expires Mar 10, 2009

State of CAUFOLUIA

County of Sprita CLAREA

On 5 June 2006 before me, Dewothy L. (e. m., personally appeared Jensheng Huang,

personally known to me or proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

(Notary Public)

	State of	)
	County of	)
Chun-Chieh Kuo	On, before me personally appeared Chun-C	e,, hieh Kuo,
	to the within instrument ar	or proved to me on the basis of the person whose name is subscribed and acknowledged to me that he/she er authorized capacity, and that by
Date	his/her signature on the inst	rument the person or the entity upon cted, executed the instrument.
	WITNESS my hand and offi	cial seal.
	(Notary Public)	
	State of	) }
	County of	ý
Lawrence S. Melvin III	On, before me, personally appeared Lawren	
	• • • • • • • • • • • • • • • • • • •	the person whose name is subscribed
Date	executed the same in his/h his/her signature on the inst	ad acknowledged to me that he/she er authorized capacity, and that by rument the person or the entity upon cted, executed the instrument.
	WITNESS my hand and offi	cial seal.
	(Notary Public)	

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## CORPORATE ASSIGNMENT

WHEREAS, the undersigned,

Jensheng Huang Chun-Chieh Kuo Lawrence S. Melvin III 2616 Heritage Park Drive, San Jose, CA 95132 #2 LN139 Chung-Cheng Rd, Hsinchu 300, TAIWAN 2673 NE Lindsey Drive, Hillsboro, OR 97124

hereinafter termed "Inventor(s)", have invented certain new and useful improvements in

METHOD AND APPARATUS FOR DETERMINING AN ACCURATE PHOTOLITHOGRAPHY PROCESS MODEL

and hav	ve executed a declaration or oath for an application for a United States patent disclosing and identifying the on:
	On the, 20;
	Or
<u>X</u>	Said application having Application Number 11/443,715 and filed on 31 May 2006; and
Middle	WHEREAS, Synopsys, Inc. a corporation of the State of Delaware, having a place of business at 700 E. field Road, Mountain View, CA 94043-4033, (hereinafter termed "Assignee"), is desirous of acquiring the

WHEREAS, Synopsys, Inc. a corporation of the State of Delaware, having a place of business at 700 E. Middlefield Road, Mountain View, CA 94043-4033, (hereinafter termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said Inventor(s) (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee:

- 1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.
- 2. Said Inventor(s) hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventor(s) shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said

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PATENT REEL: 018058 FRAME: 0437

invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventor(s) in providing such cooperation shall be paid for by said Assignee.

- 3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.
- 4. Said Inventor(s) hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below.

	State of	<b>?</b>
	County of	}
Jensheng Huang	On, before personally appeared <u>Jenshe</u>	
	satisfactory evidence, to be to the within instrument a	e or proved to me on the basis of the person whose name is subscribed and acknowledged to me that he/she
Date	his/her signature on the ins	her authorized capacity, and that by strument the person or the entity upor acted, executed the instrument.
	WITNESS my hand and of	ficial seal.
	(Notary Public)	

	State of
Chun-Chich Kno	County of )
Chun-Chieh Kuo	On, before me, personally appeared Chun-Chieh Kuo,
2006/6/13 Date	personally known to me or proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/sh executed the same in his/her authorized capacity, and that his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.
	WITNESS my hand and official seal.
	(Notary Public)
	State of )
Lawrence S. Melvin III	On, before me,  personally appeared Lawrence S. Melvin III,
Date	personally known to me or proved to me on the basis of satisfactory evidence, to be the person whose name is subscribed to the within instrument and acknowledged to me that he/shi executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.
	WITNESS my hand and official seal.
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and hav		declaration or oat	th for an applica	ation for a Ur	nited States pa	atent disclosir	ng and identifying t	he
	On the	_ day of			, 20;			
	Or							
<u>X</u>	_Said applicat	tion having Applic	cation Number_	11/443,715	and filed on	31 May 200	<u>06</u> ; and	
entire i	efield Road, Maright, title and iments of the invelopments of the invelopments of the invelopment of the inv	fountain View, C. interest in and to invention, heretof	A 94043-4033, said application ore conceived, nvention"), and	(hereinafter to n and the inverse made or disco in and to any	ermed "Assign ention discloss overed jointly and all pater	gnee"), is des sed therein, and or severally onts, inventor's	by said Inventor(s s certificates and o	the (all
to have	•	REFORE, in cons	_	od and valuat	ole considera	tion acknowle	edged by said Inver	ıtor(s)

- 1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.
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PATENT REEL: 018058 FRAME: 0440

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	State of	)
	County of	)
Jensheng Huang	On, before n personally appeared Jenshen	
	satisfactory evidence, to be to to the within instrument an	or proved to me on the basis of the person whose name is subscribed and acknowledged to me that be/she
Date	his/her signature on the inst	er authorized capacity, and that by rument the person or the entity upon cted, executed the instrument.
	WITNESS my hand and office	cial seal.
	(Notary Public)	

	•	
	State of	)
	County of	<b>'</b>
Chun-Chieh Kuo	On, before m personally appeared Chun-C	·
		the person whose name is subscribed
Date	executed the same in his/h his/her signature on the inst	ad acknowledged to me that he/she er authorized capacity, and that by rument the person or the entity upor cted, executed the instrument.
	WITNESS my hand and offi	cial seal.
	(Notary Public)	
	State of Ortsyn	· · · · <b>}</b>
Janus Sur	County of Links	<b>,</b>
Lawrence S. Mclvin III	On 6/12/66, before me, personally appeared Lawren	CHRISHOUR R. WHITE A. C. Melvin III.
6/15/06	personally known to me satisfactory evidence, to be	he person whose name is subscribed
Date	executed the same in his/h his/her signature on the insu	d acknowledged to me that he/she er authorized capacity, and that by rument the person or the entity upon cted, executed the instrument.
OFFICIAL SEAL CHRISTOPHER R WARREN NOTARY PUBLIC-OREGON	WITNESS my hand and offi	cial scal.
MY CONTRIBUTION NO. 395637 MY CONTRIBUTION EXPIRES AUGUST 8, 2009	C	
	(Notary Public)	

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PATENT REEL: 018058 FRAME: 0442

**RECORDED: 06/30/2006**