### 502252051 03/04/2013

## PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
Yongfa Fan	01/21/2013
JenSheng Huang	01/16/2013

#### RECEIVING PARTY DATA

Name:	SYNOPSYS, INC.
Street Address:	700 E. Middlefield Road
City:	Mountain View
State/Country:	CALIFORNIA
Postal Code:	94043-4033

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13740753

#### CORRESPONDENCE DATA

Fax Number: 5307591665

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 530-759-1661

Email: joanne@parklegal.com

Correspondent Name: A. Richard Park

Address Line 1: Park, Vaughan, Fleming & Dowler LLP

Address Line 2: 2820 Fifth Street

Address Line 4: Davis, CALIFORNIA 95618

ATTORNEY DOCKET NUMBER:	SNPS-1266US02 CIP
NAME OF SUBMITTER:	A. Richard Park, Reg. No. 41,241

#### Total Attachments: 4

source=SNPS-1266US02CIP\_Assignment#page1.tif source=SNPS-1266US02CIP\_Assignment#page2.tif source=SNPS-1266US02CIP\_Assignment#page3.tif source=SNPS-1266US02CIP\_Assignment#page4.tif OF \$40.00 13

PATENT REEL: 029916 FRAME: 0509

Attorney Docket No. SNPS-1266US02

#### CORPORATE ASSIGNMENT

WHEREAS, the undersigned,

Yongfa Fan JenSheng Huang 1003 W. Olive Avenue, Sunnyvale, CA 94086 1418 San Martino Court, San Jose, CA 95126

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

MODELING MASK ERRORS USING AERIAL IMAGE SENSITIVITY

and h inven		application for a United States patent disclosi	ng and identifying the
	On the day of	, 20;	
	Or		
<u>X</u>	Said application having Application N	Number 13/740,753	and filed

WHEREAS, SYNOPSYS, INC., a corporation of the State of <u>Delaware</u>, having a place of business at <u>700 E</u>. <u>Middlefield Road, Mountain View, CA 94043-4033</u>, (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 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

1

#### Attorney Docket No. SNPS-1266US02

interference or other priority proceedings involving said 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 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 Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below.

MON9 Doc	en_	1-21-2013
Yongfa Fan		Date
JenSheng Huang		Date
		Date
· .		•
		Date
		•

Date

## CORPORATE ASSIGNMENT

WHEREAS, the undersigned,

Yongfa Fan JenSheng Huang

1003 W. Olive Avenue, Sunnyvale, CA 94086 1418 San Martino Court, San Jose, CA 95126

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

# MODELING MASK ERRORS USING AERIAL IMAGE SENSITIVITY

and ha	we executed a declaration or oath for an application:	ion for a United States patent disclos	sing and identifying the
	On the day of	, 20;	
	Or		
<u>X</u>	Said application having Application Number_on_14 January 2013	13/740,753 ; and	and filed

WHEREAS, SYNOPSYS, INC., a corporation of the State of <u>Delaware</u>, having a place of business at <u>700 E</u>. <u>Middlefield Road</u>, <u>Mountain View</u>, <u>CA 94043-4033</u>, (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 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

1

interference or other priority proceedings involving said 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 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 Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below.

Yongfa Fan	Date
Mushout	Jan. 16, 2013
JenSheng Huang	Date
	Date
	Date
	Date

2