

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Tien-Chun WEI</td> <td>02/22/2013</td> </tr> <tr> <td>Jean-Marc Albert FOREY</td> <td>02/28/2013</td> </tr> <tr> <td>Kai YANG</td> <td>03/04/2013</td> </tr> <tr> <td>Kuo-Ching LIN</td> <td>02/22/2013</td> </tr> <tr> <td>Michael LYONS</td> <td>03/04/2013</td> </tr> </tbody> </table>		Name	Execution Date	Tien-Chun WEI	02/22/2013	Jean-Marc Albert FOREY	02/28/2013	Kai YANG	03/04/2013	Kuo-Ching LIN	02/22/2013	Michael LYONS	03/04/2013
Name	Execution Date												
Tien-Chun WEI	02/22/2013												
Jean-Marc Albert FOREY	02/28/2013												
Kai YANG	03/04/2013												
Kuo-Ching LIN	02/22/2013												
Michael LYONS	03/04/2013												
RECEIVING PARTY DATA													
Name:	Synopsys, Inc.												
Street Address:	700 East Middlefield Road												
Internal Address:	Bldg. C												
City:	Mountain View												
State/Country:	CALIFORNIA												
Postal Code:	94043												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13769028</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13769028								
Property Type	Number												
Application Number:	13769028												
CORRESPONDENCE DATA													
Fax Number:	4155760300												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	4155760200												
Email:	ipefiling@kilpatricktownsend.com												
Correspondent Name:	Kilpatrick Townsend & Stockton LLP												
Address Line 1:	Two Embarcadero Center												
Address Line 2:	Eighth Floor												
Address Line 4:	San Francisco, CALIFORNIA 94111												
ATTORNEY DOCKET NUMBER:	92505-006810US-865960												

OP \$40.00 13769028

NAME OF SUBMITTER:	Ardeshir Tabibi
Signature:	/Ardeshir Tabibi/
Date:	05/13/2013
<b>Total Attachments: 5</b> source=92505_06810US_865960_ASSGMT_05_13_13#page1.tif source=92505_06810US_865960_ASSGMT_05_13_13#page2.tif source=92505_06810US_865960_ASSGMT_05_13_13#page3.tif source=92505_06810US_865960_ASSGMT_05_13_13#page4.tif source=92505_06810US_865960_ASSGMT_05_13_13#page5.tif	

**ASSIGNMENT**  
(Patent Application)

We [I], the undersigned, have invented certain inventions and improvements disclosed in a utility (provisional or non-provisional) or design patent application entitled

**“Method for Ranking Fault-Test Pairs Based on Waveform Statistics in a Mutation-Based test Program Evaluation System,”**

the specification of which is identified by US Application No. 13/769,028, filed February 15, 2013.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we [I] acknowledge, we [I]:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Synopsys, Inc., 700 East Middlefield Road, Bldg. C, Mountain View, California 94043, (“Assignee”), the entire right, title, and interest in and to:
  - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
  - (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
  - (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
  - (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including

provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
5. Promise and affirm that we [I] have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our [my] signatures [signature].

Date Feb. 22, 2013

Tien-Chun Wei  
Tien-Chun Wei

Date \_\_\_\_\_

\_\_\_\_\_  
Jean-Marc Albert Forey

Date \_\_\_\_\_

\_\_\_\_\_  
Kai Yang

Date Feb 22, 2013

Kuo-Ching Lin  
Kuo-Ching Lin

Date \_\_\_\_\_

\_\_\_\_\_  
Michael Lyons

provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
5. Promise and affirm that we [I] have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our [my] signatures [signature].

Date \_\_\_\_\_

\_\_\_\_\_  
Tien-Chun Wei

Date 28 Feb 2013

\_\_\_\_\_  
Jean-Marc Albert Forey

Date \_\_\_\_\_

\_\_\_\_\_  
Kai Yang

Date \_\_\_\_\_

\_\_\_\_\_  
Kuo-Ching Lin

Date \_\_\_\_\_

\_\_\_\_\_  
Michael Lyons

provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
5. Promise and affirm that we [I] have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our [my] signatures [signature].

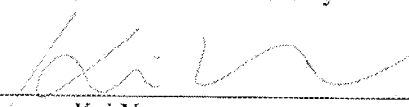
Date \_\_\_\_\_

\_\_\_\_\_  
Tien-Chun Wei

Date \_\_\_\_\_

\_\_\_\_\_  
Jean-Marc Albert Forey

Date 3/14/2013

  
\_\_\_\_\_  
Kai Yang

Date \_\_\_\_\_

\_\_\_\_\_  
Kuo-Ching Lin

Date \_\_\_\_\_

\_\_\_\_\_  
Michael Lyons

provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us [me], as well as our [my] heirs, legal representatives, and assigns.
5. Promise and affirm that we [I] have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.
6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Signed on the dates indicated beside our [my] signatures [signature].

Date \_\_\_\_\_ Tien-Chun Wei

Date \_\_\_\_\_ Jean-Marc Albert Forey

Date \_\_\_\_\_ Kai Yang

Date \_\_\_\_\_ Kuo-Ching Lin

Date 3/4/2013 \_\_\_\_\_  
Michael Lyons