

12-13-2004

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

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Docket No. CA7039392001

11-30-04

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies):</p> <p><b>1. Vinaya K. Singh</b> <b>2. Tarun Garg</b></p> <p><input checked="" type="checkbox"/> Individual(s)                      <input type="checkbox"/> Association <input type="checkbox"/> General Partnership              <input type="checkbox"/> Limited Partnership <input type="checkbox"/> Corporation-State                  <input type="checkbox"/> Other</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>Cadence Design Systems, Inc.</u> Internal Address: _____ _____ Street Address: <u>2655 Seely Avenue</u> _____ City: <u>San Jose</u>                      State: <u>CA</u>                      Zip Code: <u>95134</u></p> <p>Additional name(s) &amp; address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment                      <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement              <input type="checkbox"/> Change of Name <input type="checkbox"/> Other: _____</p> <p>Execution Dates: <b>1. November 22, 2004</b> <b>2. November 22, 2004</b></p>	

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: November 30, 2004

A. Patent Application No.(s): \_\_\_\_\_ B. Patent No.(s): \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Peter C. Mei Bingham McCutchen LLP Three Embarcadero, Suite 1800 San Francisco, CA 94111-4067</p>	<p>6. Total number of applications and patents involved: <b>1</b></p> <p>7. Total fee (37 C.F.R. § 3.41): \$40.00</p> <p><input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account, referencing <b>billing no. 7039392001</b></p> <p>8. Deposit account number: <b>50-2518</b></p>
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The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §1.21 that may be required by this paper, or to credit any overpayment to Deposit Account No. 50-2518

**DO NOT USE THIS SPACE**

9. Statement and signature.

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.

Name: Janet D. Chance                      Janet D Chance                      Date: November 30, 2004  
Registration No. 55,048                      Signature

Total number of pages including cover sheet, attachments, and document: 3

Mail documents to be recorded with required cover sheet information to:  
Mail Stop Assignment Recordation Services  
Director of the U.S. Patent and Trademark Office  
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PA/52146581/2019535-7039392001

**PATENT**  
**REEL: 016056 FRAME: 0873**

ASSIGNMENT OF PATENT APPLICATION

WHEREAS, WE, **VINAYA K. SINGH**, a citizen of India, and **TARUN GARG**, a citizen of India, hereinafter referred to as "ASSIGNORS"), have invented a certain invention entitled **TRANSFORMATION OF SIMPLE SUBSET OF PSL INTO SERE**  
**MPPLICATION FORMULAS FOR VERIFICATION WITH MODEL CHECKING AND**  
**SIMULATION ENGINES USING SEMANTIC PRESERVING REWRITE RULES** for which application for Letters Patent of the United States of America has been executed on even date herewith; and

WHEREAS, **CADENCE DESIGN SYSTEMS, INC.**, a corporation organized and existing under and by virtue of the laws of the state of **DELAWARE** and having its place of business at **2655 Seely Avenue, San Jose, California 95134** (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the exclusive right, title and interest in, to and under said invention and in, to and under any Patent or similar legal protection to be obtained therefore in the United States of America, its territorial possessions and in any and all countries foreign thereto.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer and set over unto the said ASSIGNEE, its successors and assigns, the full and exclusive right, title and interest to said invention and to all Letters Patent or application or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for said invention by said application, and to any continuation, division, renewal, substitute or reissue thereof or any legal equivalent hereof in the United States or a foreign country for the full term or terms for which the

same may be granted, including all priority rights under the International Convention;  
and ASSIGNORS hereby authorize and request the United States Commissioner of  
Patents and Trademark and any officials of foreign countries whose duty it is to issue  
patents or any legal equivalent thereof to said ASSIGNEE, its successors and assigns,  
in accordance with this Agreement.

ASSIGNORS hereby covenant that no assignment, sale, agreement or  
encumbrance has been or will be made or entered into which would conflict with this  
Agreement.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided  
promptly with all pertinent facts and documents relating to said application, said  
invention and said Letters Patent and legal equivalents as may be known and  
accessible to ASSIGNORS and will testify as to the same in any interference or litigation  
related thereto and will promptly execute and deliver to ASSIGNEE or its legal  
representative any and all papers, instruments or affidavits required to apply for, obtain,  
maintain, issue and enforce said application, said invention and said Letters Patent and  
said equivalents in the United States or in any foreign country, which may be necessary  
or desirable to carry out the purpose thereof.

Date: 11/22/2004

  
\_\_\_\_\_  
Vinaya K. Singh

Date: 11/22/2004

  
\_\_\_\_\_  
Tarun Garg

ASSIGNMENT OF PATENT APPLICATION

WHEREAS, WE, **VINAYA K. SINGH**, a citizen of India, and **TARUN GARG**, a citizen of India, hereinafter referred to as "ASSIGNORS"), have invented a certain invention entitled **TRANSFORMATION OF SIMPLE SUBSET OF PSL INTO SERE IMPLICATION FORMULAS FOR VERIFICATION WITH MODEL CHECKING AND SIMULATION ENGINES USING SEMANTIC PRESERVING REWRITE RULES** for which application for Letters Patent of the United States of America has been executed on even date herewith; and

WHEREAS, **CADENCE DESIGN SYSTEMS, INC.**, a corporation organized and existing under and by virtue of the laws of the state of **DELAWARE** and having its place of business at **2655 Seely Avenue, San Jose, California 95134** (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the exclusive right, title and interest in, to and under said invention and in, to and under any Patent or similar legal protection to be obtained therefore in the United States of America, its territorial possessions and in any and all countries foreign thereto.


NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer and set over unto the said ASSIGNEE, its successors and assigns, the full and exclusive right, title and interest to said invention and to all Letters Patent or application or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for said invention by said application, and to any continuation, division, renewal, substitute or reissue thereof or any legal equivalent hereof in the United States or a foreign country for the full term or terms for which the

same may be granted, including all priority rights under the International Convention;  
and ASSIGNORS hereby authorize and request the United States Commissioner of  
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invention and said Letters Patent and legal equivalents as may be known and  
accessible to ASSIGNORS and will testify as to the same in any interference or litigation  
related thereto and will promptly execute and deliver to ASSIGNEE or its legal  
representative any and all papers, instruments or affidavits required to apply for, obtain,  
maintain, issue and enforce said application, said invention and said Letters Patent and  
said equivalents in the United States or in any foreign country, which may be necessary  
or desirable to carry out the purpose thereof.

Date: 11/22/2004

  
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Vinaya K. Singh

Date: 11/22/2004

  
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Tarun Garg