

## 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>Regis Colwell</td> <td>10/26/2012</td> </tr> <tr> <td>Arnold Ginetti</td> <td>10/23/2012</td> </tr> <tr> <td>Khalid ElGalaind</td> <td>10/31/2012</td> </tr> <tr> <td>Thomas Jordan</td> <td>10/24/2012</td> </tr> <tr> <td>Jose A. Martinez</td> <td>10/30/2012</td> </tr> <tr> <td>Jeffrey Markham</td> <td>10/30/2012</td> </tr> <tr> <td>Steven Riley</td> <td>10/30/2012</td> </tr> <tr> <td>Chung-Do Yang</td> <td>10/30/2012</td> </tr> </tbody> </table>		Name	Execution Date	Regis Colwell	10/26/2012	Arnold Ginetti	10/23/2012	Khalid ElGalaind	10/31/2012	Thomas Jordan	10/24/2012	Jose A. Martinez	10/30/2012	Jeffrey Markham	10/30/2012	Steven Riley	10/30/2012	Chung-Do Yang	10/30/2012
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RECEIVING PARTY DATA																			
<table border="1"> <tr> <td>Name:</td> <td>Cadence Design Systems, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>2655 Seely Avenue, Building 5</td> </tr> <tr> <td>City:</td> <td>San Jose</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>95134</td> </tr> </table>		Name:	Cadence Design Systems, Inc.	Street Address:	2655 Seely Avenue, Building 5	City:	San Jose	State/Country:	CALIFORNIA	Postal Code:	95134								
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CORRESPONDENCE DATA																			
<p>Fax Number: 6123393061  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 612-373-6900        Email: jehlers@slwip.com        Correspondent Name: Schwegman, Lundberg &amp; Woessner, P.A.        Address Line 1: P.O. Box 2938        Address Line 4: Minneapolis, MINNESOTA 55416</p>																			
ATTORNEY DOCKET NUMBER:	3225.125US1																		

PATENT

NAME OF SUBMITTER:

Jamie A. Ehlers

Total Attachments: 10

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### ASSIGNMENT

WHEREAS, Regis Colwell, Arnold Ginetti, Khalid ElGalaind, Thomas Jordan, Jose A. Martinez, Jeffrey Markham, Steven Riley, Chung-Do Yang (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention") which are described in a patent application filed on October 31, 2012, which application was assigned US patent application serial number 13/665,760, and which is titled PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to Cadence Design Systems, Inc. (the "Assignee"), a corporation of the State of DE, having a place of business at 2655 Seely Avenue, Building 5, San Jose, CA 95134, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the Invention which is disclosed in the above-identified application or applications;

such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such Invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such Invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such Invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 97337 may (directly or through his/her designee) delete, insert, or alter any

**Assignment**

Assignors: Regis Colwell et al.

Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Undersigned, and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Undersigned shall (1) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other patent applications for the Invention; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the Invention; (3) communicate to the Assignee all facts known to the Undersigned relating to the Invention and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for the Invention; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such Invention in the Assignee, or for securing, maintaining and enforcing proper patent protection for the Invention;

COVENANT, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions. To the extent that any such provision is found to be unenforceable, the Undersigned, when requested and without compensation shall act in good faith to substitute for such provision a new provision with content and purpose as close as possible to the provision deemed unenforceable.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

**Assignment**

Assignors: Regis Colwell et al.

Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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**Assignor:**

(Signature): 

Name: Regis Colwell

City/State: Gibsonia, PA

Date: 10/26/12

**Assignment**

Assignors: Regis Colwell et al.

Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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**Assignor:**

(Signature):



Name: Arnold Ginetti

City/Country: Antibes, France

Date: October 23rd 2012

**Assignment**

Assignors: Regis Cofwell et al.

Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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**Assignor:**

(Signature): 

Name: Khalid ElGalaind

City/State: Allison Park, PA

Date: 10-31-2012

**Assignment**

Assignors: Regis Colwell et al.

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

**Assignor:**

(Signature): Thomas A. Jordan

Name: Thomas Jordan

City/State: Pittsburgh, PA

Date: OCT. 24, 2012



**Assignment**

Assignors: Regis Colwell et al.

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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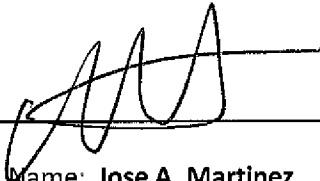
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Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

**Assignor:**

(Signature):

A handwritten signature in black ink, appearing to be 'Jose A. Martinez', written over a horizontal line.

Name: Jose A. Martinez

City/State: Pittsburgh, PA

Date:

10/30/2012

**Assignment**

Assignors: Regis Colwell et al.

Docket No: 3225.125US1 / 12PA048US01

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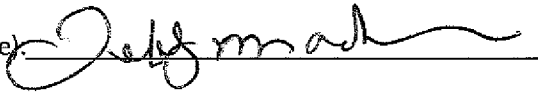
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**Assignor:**

(Signature) \_\_\_\_\_



Name: Jeffrey Markham

City/State: San Jose, CA

Date: Oct 30, 2012

**Assignment**

Assignors: Regis Colwell et al.

Docket No: 3225.125US1 / 12PA048US01

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Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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**Assignor:**

(Signature):



Name: Steven Riley

City/State: San Jose, CA

Date: 30 Oct 2012

**Assignment**

Assignors: Regis Colwell et al.

Title: PRODUCING A NET TOPOLOGY PATTERN AS A CONSTRAINT UPON ROUTING OF SIGNAL PATHS IN AN INTEGRATED CIRCUIT DESIGN

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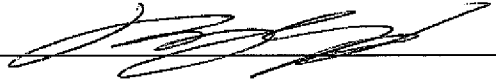
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Docket No: 3225.125US1 / 12PA048US01

Client Ref. No. 12PA048US01

**Assignor:**

(Signature):



Name: Chung-Do Yang

City/State: Saratoga, CA

Date:

10/30/2012