

Form PTO-1595

U.S. Department of Commerce
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NP005

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

<p>1. Name of conveying party(ies): Epson Research and Development, Inc. 150 River Oaks Parkway, Suite 225 San Jose, CA 95134</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): Name: <i>Seiko Epson Corporation</i> Internal Address: Street Address: <i>4-1 Nishishinjuku 2-Chome, Shinjuku-ku, Tokyo, Japan</i></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 Date: October 5, 2004</p>	<p>Additional name(s) and addresses attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		
<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:</p> <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;">A. Patent Application No(s). 10/833,397</td> <td style="width:50%; border: none;">B. Patent No(s).</td> </tr> </table> <p style="text-align: center;">Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		A. Patent Application No(s). 10/833,397	B. Patent No(s).
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<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p style="padding-left: 40px;">Intellectual Property Department Epson Research and Development, Inc. 150 River Oaks Parkway, Suite 225 San Jose, CA 95134 Customer No. 20178</p>	<p>6. Total number of applications and patents involved: <p style="text-align: center;">1</p></p> <p>7. Total fee (37 CFR 3.41).....\$40.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account.</p> <p>8. Deposit Account Number: <u>19-2746</u></p>		
DO NOT USE THIS SPACE			
<p>9. Statement and signature: <i>To the best of my knowledge and belief, the foregoing information is true and correct and any copy is a true copy of the original document.</i></p> <p style="text-align: center;"> Date: 10/06/04</p> <p>Rosalio Haro Registration No. 42,633</p>			
<table style="width:100%; border: none;"> <tr> <td style="width:85%; border: none;">Total number of pages including cover sheet, attachments and document:</td> <td style="width:15%; border: none; text-align: center;">3</td> </tr> </table>		Total number of pages including cover sheet, attachments and document:	3
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ASSIGNMENT
Corporate

EPSON RESEARCH AND DEVELOPMENT, INC., a California Corporation, having a principal place of business at 150 River Oaks Parkway, Suite 225, San Jose, California 95134 (hereafter the "Assignor"), is the owner by respective Assignment of United States Patent Application identified below (hereafter sometimes called the "Patent Application").

SEIKO EPSON CORPORATION, a corporation of Japan, having a place of business at 4-1 Nishishinjuku 2-chome, Shinjuku-ku Tokyo, Japan (hereafter the "Assignee"), desires to acquire all of the rights to the Patent Application and all inventions described and claimed therein.

THEREFORE, in consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to it, Assignor hereby sells and assigns to the Assignee the entire right, title and interest in and to the Patent Application identified below, and all inventions described and claimed therein, in any and all Letters Patent therefor, and in any and all reissues, extensions, renewals, reexaminations, divisions and continuations of such applications or Letters Patent to the full end of the term or terms for which such Letters Patent issue, such entire right, title and interest to be held and enjoyed by the above-named Assignee the same as they would have been held and enjoyed by the Assignor had this Assignment and sale not been made.

<u>ERD Case No.</u>	<u>U. S. Serial No.</u>	<u>U. S. Filing Date</u>	<u>Title</u>
NP005	10/833,397	April 28, 2004	Differential Current Mode Phase/Frequency Detector Circuit

By its undersigned representative, the Assignor agrees

a. to execute all papers necessary in connection with the Patent Application and any continuing, divisional, reissue, reexamination or corresponding application thereof and also to execute a separate Assignment in connection with such application as the Assignee may deem necessary or expedient;

b. to execute all papers necessary in connection with any interference which may be declared concerning the Patent Application or any continuation, division, reissue or reexamination thereof and to cooperate with

NP005 10/833,397 Corporate Assignment
 the Assignee in every way possible in obtaining evidence and going forward with such interference; and
 c. to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee on the Patent Application and on any continuation, division, reissue or reexamination of the Patent Application.

The Assignor hereby covenants that it has the full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict therewith.

EPSON RESEARCH AND DEVELOPMENT, INC., a California Corporation, certifies that it is the Assignee of the entire right, title and interest in the Patent Application identified above by virtue of Assignment from the inventor(s) of the Patent Application identified above. The Assignment is recorded in the Patent and Trademark Office as identified below.

<u>ERD</u> Case No.	<u>U. S. Serial</u> No.	<u>Assignment</u> <u>Execution Date(s)</u>	Reel	Frame
NP005	10/833,397	May 12, 2004, respectively	015099	0523

The undersigned is empowered to sign this certificate on behalf of the Assignor.

IN WITNESS WHEREOF, executed by the Assignor's undersigned representative on the date following the undersigned's name.

EPSON RESEARCH AND DEVELOPMENT, INC.

By: Junichi Okada
 Junichi Okada
 President

Oct. 05. 04
 Date