

08-17-2000

MAT-7926US



PATENT ONLY

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

R

101437092

.ET

PATENTS ONLY

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

<p>1. Name of conveying party(ies): <u>Kengo Shijba, Munenori Fujimura, Hitoshi Uchi, Shuichiro Yamaguchi, Takayuki Takeuchi, Yasuhiko Horio, Hiroshi Kawano, Hiromi Tokunaga</u></p> <p>Additional name(s) of conveying party(ies) 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</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Correction of Assignment Recordation (previously recorded at Reel _____, Frame _____).</p> <p><input type="checkbox"/> Other</p> <p>Execution Date: <u>July 6, 2000</u></p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>Matsushita Electric Industrial Co., Ltd.</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>1006, Oaza Kadoma, Kadoma-shi</u></p> <p>City: <u>Osaka</u> State: <u>JAPAN</u> ZIP: <u>571-8501</u></p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>4. Application number(s) or patent number(s):</p> <p>If this document is being filed together with a new application, the execution date of the application is: _____</p> <p>A. Patent Application Number(s) <u>09/522,233</u> B. Patent Number(s) _____</p> <p>Additional number(s) attached? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Lawrence E. Ashery</u></p> <p>Internal Address: <u>Ratner & Prestia</u></p> <p>Street Address: <u>Suite 301, One Westlakes, Berwyn, P.O. Box 980</u></p> <p>City: <u>Valley Forge</u> State: <u>PA</u> ZIP: <u>19482-0980</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41): <u>\$40.00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number: <u>18-0350</u> (Attach duplicate copy of this page if paying by deposit account.)</p>

DO NOT USE THIS SPACE

<p>9. Statement and signature.</p> <p><i>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.</i></p> <p>Andrew L. Ney <u>Andrew L. Ney</u> <u>July 20, 2000</u></p> <p>Name of Person Signing _____ Signature _____ Date _____</p> <p>20,300</p> <p>Registration. No. _____</p>	
<p>Total number of pages including cover sheet, attachments, and document: <u>3</u></p>	
<p>OMB No. 0651-0011 (exp. 4/94)</p> <p>Do not detach this portion</p> <p>Mail documents to be recorded with required cover sheet information to:</p> <p>Commissioner of Patents and Trademarks</p> <p>Box Assignments</p> <p>Washington, D.C. 20231</p> <p>08/17/2000 NTHA11 00000076 09522233</p> <p>01 FC:501 40.00 OP</p>	

No legalization required

ASSIGNMENT

WHEREAS, the ASSIGNOR, comprising the following named inventor(s)

Inventor(s)ASSIGNOR(s)/
INVENTOR(s)

INVENTOR(s)

- | | |
|-----------------------------|-------------------------------|
| 1. <u>Kengo Shiiba</u> | 2. <u>Munenori Fujimura</u> |
| 3. <u>Hitoshi Uchi</u> | 4. <u>Shuichiro Yamaguchi</u> |
| 5. <u>Takayuki Takeuchi</u> | 6. <u>Yasuhiko Horio</u> |
| 7. <u>Hiroshi Kawano</u> | 8. <u>Hiromi Tokunaga</u> |

has made an invention entitled: NON-RECIPROCAL CIRCUIT DEVICE,
METHOD OF MANUFACTURING, AND MOBILE COMMUNICATION
APPARATUS USING THE SAME

and has executed an application for Letters Patent of the United States
concurrently herewith;

WHEREAS, the ASSIGNEE

ASSIGNEE
(Full Name
and address)

Matsushita Electric Industrial Co., Ltd.

1006, Oaza Kadoma, Kadoma-shi, Osaka, 571-8501 Japan

is desirous of acquiring the entire interest in and to said invention and the
Letters Patent to be obtained therefor,

NOW, THEREFORE, in consideration of the payment by ASSIGNEE to
ASSIGNOR of a sum corresponding to One Dollar (\$1.00), and for other good
and valuable consideration, the receipt of which is hereby acknowledged,
ASSIGNOR, intending to be legally bound, hereby sells, assigns and transfers
to ASSIGNEE, its successors and assigns the full and exclusive right, title and
interest in and to said invention, all applications for Letters Patent for said
invention, including all divisions and continuations thereof, all rights to claim
priority based thereon, and all Letters Patent, including reissues, to be obtained
therefor, including any and all foreign patent rights in this invention
corresponding thereto.

ASSIGNOR hereby warrants that no assignment, sale, agreement or
encumbrance has been or will be made or entered into which would conflict
with this Assignment.

ASSIGNOR agrees it shall be legally bound, upon request of the ASSIGNEE or its successors or assigns or a legal representative thereof, to supply all information and evidence of which the ASSIGNOR has knowledge or possession, relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention in the United States of America and foreign countries in the name of the ASSIGNEE, and to execute all instruments proper to carry out the intent of this instrument.

If the invention requires a biological deposit, ASSIGNOR also grants to ASSIGNEE such control over any deposit made by ASSIGNOR as may be necessary to the validity of the patent rights assigned herein.

ASSIGNOR authorizes ASSIGNOR's attorney to insert at the end hereof the serial number and filing date of the aforesaid application for United States Letters Patent and/or the Attorney docket or file designation for this application.

If the ASSIGNOR includes more than one individual, these obligations shall apply to these individuals both individually and collectively.

IN WITNESS WHEREOF, this Assignment is executed on the day indicated below.

(Typed or Printed Name)	(Signature)	(Date)
1. <u>Kengo Shiiba</u>	<u>Kengo Shiiba</u>	<u>July 6, 2000</u>
2. <u>Munenori Fujimura</u>	<u>Munenori Fujimura</u>	<u>July 6, 2000</u>
3. <u>Hitoshi Uchi</u>	<u>Hitoshi Uchi</u>	<u>July 6, 2000</u>
4. <u>Shuichiro Yamaguchi</u>	<u>Shuichiro Yamaguchi</u>	<u>July 6, 2000</u>
5. <u>Takayuki Takeuchi</u>	<u>Takayuki Takeuchi</u>	<u>July 6, 2000</u>
6. <u>Yasuhiko Horio</u>	<u>Yasuhiko Horio</u>	<u>July 6, 2000</u>
7. <u>Hiroshi Kawano</u>	<u>Hiroshi Kawano</u>	<u>July 6, 2000</u>
8. <u>Hiromi Tokunaga</u>	<u>Hiromi Tokunaga</u>	<u>July 6, 2000</u>

Application for United States Letters Patent

Serial No. 09/522,233

Filed March 9, 2000,

Attorney Docket No. MAT-7926US.