

08-22-2002

To the Assistant Commissioner for F



1. Name of conveying party(ies)

Shunsuke HIRANO  
Yasunori MIYAHARA

*08/15/02*

102198187

ing party(ies):

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.  
1006, Oaza Kadoma  
Kadoma-shi  
Osaka 571-0000 JAPAN

Addit'l name(s) of conveying party(ies) attached?  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement
- Change of name
- Other

Execution Date: May 24, 2002

Addit'l. name(s) & address(es) attached?  Yes  No

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: August 15, 2002

A. Patent Application No.

B. Patent No.(s)

*10/21 8658*

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Louis Woo, Esq.  
Law Offices of Louis Woo  
1901 N. Fort Myer Drive  
Suite 501  
Arlington State: VA Zip: 22209  
CUSTOMER NO. 021395

6. Total number of applications and patents involved [1]

7. Total fee (37 CFR 3.41).....\$40.00  
 Enclosed  
 Authorized to be charged to deposit account  
 Charge deficiencies/credit overpayments to Deposit Account 50-0501

8. Deposit Account No: 50-0501  
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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.

*[Signature]*

Date: *Aug 15 2002*

Louis Woo  
Reg. No. 31,730

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08/15/02

ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- |                              |           |
|------------------------------|-----------|
| (1) <u>Shunsuke HIRANO</u>   | (4) _____ |
| (2) <u>Yasunori MIYAHARA</u> | (5) _____ |
| (3) _____                    | (6) _____ |

who have made a certain new and useful invention, hereby sell, assign and transfer unto

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. of 1006, Oaza Kadoma  
Kadoma-shi, Osaka 571-0000 Japan

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

DIRECT CONVERSION RECEIVER, MOBILE RADIO EQUIPMENT USING THE SAME,  
AND RF SIGNAL RECEIVING METHOD

(a) for which an application for United States Letters Patent was filed on \_\_\_\_\_, and identified by United States Serial No. \_\_\_\_\_; or

(b) for which an application for United States Letters Patent was executed on \_\_\_\_\_,

and the undersigned hereby authorize and request the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals, continuations, or continuations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agree to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the dates indicated aside our signatures:

INVENTORS

DATE SIGNED

- 1) Shunsuke Hirano  
Name: Shunsuke HIRANO
- 2) Yasunori Miyahara  
Name: Yasunori MIYAHARA
- 3) \_\_\_\_\_  
Name: \_\_\_\_\_
- 4) \_\_\_\_\_  
Name: \_\_\_\_\_
- 5) \_\_\_\_\_  
Name: \_\_\_\_\_
- 6) \_\_\_\_\_  
Name: \_\_\_\_\_

- May 24, 2002
- May 24, 2002
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