



PATENT

# 5-14-03

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Yoshihide KOMATSU et al.

Serial No.: 10/387,132

Filed: March 13, 2003

For: TRANSMISSION DEVICE, RECEPTION DEVICE, TEST CIRCUIT, AND

TEST METHOD

### ASSIGNMENT TRANSMITTAL LETTER

Mail Stop Missing Parts Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

Please record the attached Assignment in the name of the assignor and the assignee as indicated below and return the original document to the undersigned.

1	Cashmi	eeion	Type	
1 -	Submi	ssion	TVDE	۰

Submission Type:	Conveyance Type:
<pre>X New Resubmission (Non-Recordation) Document ID# Correction of PTO Error Reel # Frame # Corrective Document Reel # Frame #</pre>	X Assignment Security Agreement License Change of Name Merger Other  CO C
	· · · · · · · · · · · · · · · · · · ·

**PATENT** REEL: 014070 FRAME: 0433 Name of Conveying Party(ies):

Yoshihide Komatsu and Toru Iwata.

3. Name and Address of Receiving Party(ies):

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. 1006, Oaza Kadoma Kadoma-shi, Osaka 571-8501 Japan.

- 4. Execution Date of Assignment: April 21, 2003.
- 5. If this Assignment is being filed together with a new application, the execution date of the application is: <u>April 21, 2003</u>.
- 6. Total number of applications and patents involved: 1.

All correspondence should be addressed to:

Charles A. Wendel
PARKHURST & WENDEL, L.L.P.
Suite 210
1421 Prince Street
Alexandria, VA 22314-2805.

The Assignment recordation fee (\$40.00) is covered by our attached Check Number 16540 .

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. Total number of pages including cover sheet, attachments and document  $\underline{4}$ .

## ASSIGNMENT

		(1) Yoshihide KOMATSU	(5)
	•	(2) <u>Toru IWATA</u>	
(1-8)	Insert Name(s) of Inventor(s)	(3)	(7)
		(4)	
			llar (\$1.00) and other good and valuable consideration undersigned agree(s) to assign, and hereby does assign
(9)	Insert name of Assignee	(9) MATSUSHITA ELECTRIC IN	DUSTRIAL CO., LTD.
(10)	Insert address of Assignee	(10) 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 Japan	
			nee) the entire right, title and interest for the United do possessions, in the invention, and all applications for nay be granted therefor, known as
(11)	Insert Identification of		RECEPTION DEVICE, TEST CIRCUIT,
	Invention, such as Title,  Case Number or Foreign	AND TEST METHOD (O	Case No. HYAE: 160
-	Application Number		
		for which the undersigned has (have) of America	executed an application for patent in the United State
(12)	Insert Date of Signing of	(12 on April 21, 2003	
` ,	Application		,
(13)	Alternative identification for filed applications	(13) U.S. application Serial Number	10/387,132
		filed March 13,2003	on with the application and any continuing or divisiona
or exp	ning this application or continua	to execute all papers necessary in contion or division thereof and to cooperate	such applications as the Assignee may deem necessary nection with any interference which may be declared with the Assignee in every way possible in obtaining
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to daims or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby autofacted to the Assignee from said application interest, and hereby covenants the not executed and will not execute 6) The undersigned hereby grapher identification which may be a second to the same agree of the undersigned hereby grapher identification which may be a second to the same agree of the undersigned hereby grapher identification which may be a second to the same agree of the undersigned hereby grapher identification which may be a second to the same agree of the undersigned hereby grapher identification which may be a second to the same agree of t	to execute all papers necessary in contion or division thereof and to cooperate nterference.  o execute all papers and documents and pational Convention for Protection of Industry the papers and request(s) the Commissionation or any divisions or continuing application or any divisions or continuing application that (they have) full right to convey the papers and the passenger of the passenger o	nection with any interference which may be declared with the Assignee in every way possible in obtaining perform any act which may be necessary in connection
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to diams or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby autoficities resulting from said application from the executed and will not execute 6) The undersigned hereby grapher identification which may be recordation of this document.  In witness whereof, executed	to execute all papers necessary in contion or division thereof and to cooperate nterference.  To execute all papers and documents and pational Convention for Protection of Industry perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing applicate the has (they have) full right to convey the any agreement in conflict herewith.  The ant(s) the firm of PARKHURST & WE necessary or desirable in order to comply the system of the date(s) opp	nection with any interference which may be declared with the Assignee in every way possible in obtaining perform any act which may be necessary in connection trial Property or similar agreements. be necessary to obtain a grant of a valid United States of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they NDEL, L.L.P. the power to insert on this assignment with the rules of the United States Patent and Trademark to site the undersigned name(s).
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to laims or provisions of the Interna 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby auto to the Assignee from said application application of the interest, and hereby covenants the not executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/st 200	to execute all papers necessary in contion or division thereof and to cooperate nterference.  o execute all papers and documents and pational Convention for Protection of Industry perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing application or any agreement in conflict herewith.  ant(s) the firm of PARKHURST & WE necessary or desirable in order to comply where the undersigned on the date(s) opposition.  Name of Inventor	nection with any interference which may be declared with the Assignee in every way possible in obtaining perform any act which may be necessary in connection trial Property or similar agreements. be necessary to obtain a grant of a valid United States of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they NDEL, L.L.P. the power to insert on this assignment with the rules of the United States Patent and Trademark to the undersigned name(s).  (SEAL)
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to laims or provisions of the Interna 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby auto to the Assignee from said application application of the interest, and hereby covenants the mot executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/51 200	to execute all papers necessary in contion or division thereof and to cooperate interference.  To execute all papers and documents and pational Convention for Protection of Industry perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing application or any divisions or continuing application or any divisions or continuing application or any agreement in conflict herewith.  ant(s) the firm of PARKHURST & WE necessary or desirable in order to comply the undersigned on the date(s) opp  Name of Inventor  Name of Inventor	nection with any interference which may be declared with the Assignee in every way possible in obtaining perform any act which may be necessary in connection trial Property or similar agreements. The necessary to obtain a grant of a valid United States are of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they note that the rules of the United States Patent and Trademark the rules of the United States Patent and Trademark the formation (SEAL)  Livatar (SEAL)
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to laims or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby autorities resulting from said application interest, and hereby covenants the not executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/st 200	to execute all papers necessary in contition or division thereof and to cooperate interference.  To execute all papers and documents and pational Convention for Protection of Industry in the papers and request(s) the Commissionation or any divisions or continuing application or any	nection with any interference which may be declared with the Assignee in every way possible in obtaining perform any act which may be necessary in connection trial Property or similar agreements. be necessary to obtain a grant of a valid United States of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they NDEL, L.L.P. the power to insert on this assignment with the rules of the United States Patent and Trademark to the undersigned name(s).  [SEAL]  [SEAL]
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to laims or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby autorite to the Assignee from said application said application terest, and hereby covenants that not executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/st 200  Date Date Date Date Date	to execute all papers necessary in contion or division thereof and to cooperate nterference.  o execute all papers and documents and pational Convention for Protection of Industry thorize(s) and request(s) the Commissionation or any divisions or continuing applied the has (they have) full right to convey the any agreement in conflict herewith.  ant(s) the firm of PARKHURST & WE necessary or desirable in order to comply the undersigned on the date(s) opp  Name of Inventor  Name of Inventor  Name of Inventor  Name of Inventor	nection with any interference which may be declared with the Assignee in every way possible in obtaining the serform any act which may be necessary in connection trial Property or similar agreements. The necessary to obtain a grant of a valid United States are of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they NDEL, L.L.P. the power to insert on this assignment with the rules of the United States Patent and Trademark to the undersigned name(s).    Consider the undersigned name(s). (SEAL) (SEAL) (SEAL)
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to daims or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby automates the states resulting from said application application and the executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/51 200  Date April 2/51 200  Date Date Date Date Date Date Date Date	to execute all papers necessary in contition or division thereof and to cooperate interference.  To execute all papers and documents and pational Convention for Protection of Industry perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing application or any divisio	nection with any interference which may be declared with the Assignee in every way possible in obtaining thereform any act which may be necessary in connection trial Property or similar agreements. The necessary to obtain a grant of a valid United States are of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the the entire interest herein assigned, and that he has (they note that the rules of the United States Patent and Trademark to site the undersigned name(s).  [SEAL]  [SEAL]  [SEAL]  [SEAL]
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to laims or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby automates the states resulting from said application application and hereby covenants the not executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/51 200  Date Date Date Date Date Date Date Date	to execute all papers necessary in contition or division thereof and to cooperate interference.  o execute all papers and documents and pational Convention for Protection of Industry thorize(s) and request(s) the Commissionation or any divisions or continuing applicate the has (they have) full right to convey the any agreement in conflict herewith.  ant(s) the firm of PARKHURST & WE necessary or desirable in order to comply the theory of Inventor  Name of Inventor	nection with any interference which may be declared with the Assignee in every way possible in obtaining overform any act which may be necessary in connection trial Property or similar agreements. be necessary to obtain a grant of a valid United States of the necessary to obtain a grant of a valid United States of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they note the undersigned name of the United States Patent and Trademark of the undersigned name(s).  (SEAL)  (SEAL)  (SEAL)  (SEAL)
conce evider with c patent United entire have)	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to take the internation of the Internation of the Internation of the Assignee.  5) The undersigned hereby automated the Assignee of the Assignee of the Assignee of the Internation of the Internation of the Internation of the Internation of this document.  In witness whereof, executed Date April 2/5t 200  Date Date Date Date Date Date Date Date	to execute all papers necessary in contition or division thereof and to cooperate interference.  To execute all papers and documents and pational Convention for Protection of Industry in perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing application or any divisions or continuing application and the has (they have) full right to convey the same and the firm of PARKHURST & WE necessary or desirable in order to comply the undersigned on the date(s) opp  By the undersigned on the date(s) opp  Name of Inventor	nection with any interference which may be declared with the Assignee in every way possible in obtaining overform any act which may be necessary in connection trial Property or similar agreements.  be necessary to obtain a grant of a valid United States of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they NDEL, L.L.P. the power to insert on this assignment with the rules of the United States Patent and Trademark cosite the undersigned name(s).  (SEAL)  (SEAL)  (SEAL)  (SEAL)  (SEAL)
or exp conce evider with of patent United entire have) any fu Office	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to laims or provisions of the Internation 4) The undersigned agree(s) to the Assignee.  5) The undersigned hereby autorite to the Assignee from said application application and hereby covenants the mot executed and will not execute 6) The undersigned hereby grather identification which may be recordation of this document.  In witness whereof, executed Date April 2/st 200  Date Date Date  Date	to execute all papers necessary in contition or division thereof and to cooperate interference.  o execute all papers and documents and pational Convention for Protection of Industs of perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing applicate the has (they have) full right to convey the part of PARKHURST & WE necessary or desirable in order to comply the undersigned on the date(s) opposition in the part of Inventor  Name of Inventor	nection with any interference which may be declared with the Assignee in every way possible in obtaining overform any act which may be necessary in connection trial Property or similar agreements. be necessary to obtain a grant of a valid United States of the necessary to obtain a grant of a valid United States or of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they note that the rules of the United States Patent and Trademark of the undersigned name(s).    SEAL   (SEAL)   (SEAL)     (SEAL)   (SEAL)     (
or exp conce evider with of patent United entire have) any fu Office	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to take the Assignee.  4) The undersigned agree(s) to to the Assignee.  5) The undersigned hereby automates the states resulting from said application application and the executed and will not execute the executed and will not execute the identification which may be recordation of this document.  In witness whereof, executed Date April 2/5t 200  Date Date Date Date Date This assignment should preferate If neither, then it should be signed.	to execute all papers necessary in contition or division thereof and to cooperate interference.  To execute all papers and documents and pational Convention for Protection of Industry perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing application or any divisio	nection with any interference which may be declared with the Assignee in every way possible in obtaining with the Assignee in every way possible in obtaining perform any act which may be necessary in connection trial Property or similar agreements.  be necessary to obtain a grant of a valid United States are of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the the entire interest herein assigned, and that he has (they note that the rules of the United States Patent and Trademark with the rules of the United States Patent and Trademark cosite the undersigned name(s).  (SEAL)
or exp conce evider with of patent United entire have) any fu Office	2) The undersigned agree(s) ming this application or continuate and going forward with such it 3) The undersigned agree(s) to take the Assignee.  4) The undersigned agree(s) to to the Assignee.  5) The undersigned hereby automates the states resulting from said application application and the executed and will not execute the executed and will not execute the identification which may be recordation of this document.  In witness whereof, executed Date April 2/5t 200  Date Date Date Date Date This assignment should preferate If neither, then it should be signed.	to execute all papers necessary in contition or division thereof and to cooperate interference.  To execute all papers and documents and pational Convention for Protection of Industry perform all affirmative acts which may thorize(s) and request(s) the Commissionation or any divisions or continuing application or any divisio	nection with any interference which may be declared with the Assignee in every way possible in obtaining overform any act which may be necessary in connection trial Property or similar agreements. be necessary to obtain a grant of a valid United States of the necessary to obtain a grant of a valid United States or of Patents to issue any and all Letters Patents of the cations thereof to the said Assignee, as Assignee of the he entire interest herein assigned, and that he has (they note that the rules of the United States Patent and Trademark of the undersigned name(s).    SEAL   (SEAL)   (SEAL)     (SEAL)   (SEAL)     (

RECORDED: 05/14/2003 REEL: 014070 F

PATENT REEL: 014070 FRAME: 0435