PATENTS ONLY	PATENTS ONLY
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Pleas	
1. Name of conveying party(ies) Takaaki KISIGAMI Takashi FUKAGAWA Yasuaki YUDA Keiji TAKAKUSAKI Shoji MIYAMOTO Additional name(s) of conveying party(ies) attached? [] Yes [XX] No	Pr copy thereof 2. Name and Address of receiving party(ies) Name: Matsushita Electric Industrial Co., Ltd. Address: 1006, Oaza Kadoma, Kadoma-shi, Osaka, 571-8501 JAPAN Additional name(s) & address(es) attached? J Yes XXJ No
Nature of conveyance: [X] Assignment [] Change of Name [] Security Agreement [] Merger	[] Other
Execution Date: April 25, 2003	
Application number(s) or patent number(s). If this document the application is: Date A. Patent Application No(s). 10/430,397	nt is being filed together with a new application, the execution date of B. Patent No(s).
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Additional numbers atta	ached? [] Yes [XX] No
)	ached? [] Yes [XX] No 6. Number of applications and patents involved: One (1)
Additional numbers atta	Number of applications and patents involved:
5. Name and address of party to whom correspondence concerning document should be mailed: BROWDY AND NEIMARK, P.L.L.C.	6. Number of applications and patents involved: One (1)
Additional numbers atta 5. Name and address of party to whom correspondence concerning document should be mailed: BROWDY AND NEIMARK, P.L.L.C. 624 Ninth Street, N.W. Suite 300 Washington, D.C. 20001-5303	Number of applications and patents involved: One (1) 7. PTO Form-2038 in the amount of \$40.00 is attached. 8. If insufficient fees are attached to accomplish the present order, please charge any necessary additional fees to
5. Name and address of party to whom correspondence concerning document should be mailed: BROWDY AND NEIMARK, P.L.L.C. 624 Ninth Street, N.W. Suite 300 Washington, D.C. 20001-5303 Do Not U	6. Number of applications and patents involved: One (1) 7. PTO Form-2038 in the amount of \$40.00 is attached. 8. If insufficient fees are attached to accomplish the present order, please charge any necessary additional fees to Deposit Account 02-4035. Use This Space
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5. Name and address of party to whom correspondence concerning document should be mailed: BROWDY AND NEIMARK, P.L.L.C. 624 Ninth Street, N.W. Suite 300 Washington, D.C. 20001-5303 Do Not U. 9. Statement and Signature. To the best of my knowledge and belief, the foregoing informoriginal document. Norman J. Latker (Reg. No. 19,963)	6. Number of applications and patents involved: One (1) 7. PTO Form-2038 in the amount of \$40.00 is attached. 8. If insufficient fees are attached to accomplish the present order, please charge any necessary additional fees to Deposit Account 02-4035. Use This Space mation is true and correct and any attached copy is a true copy of the

PATENT REEL: 014272 FRAME: 0983

ASSIGNMENT

(1-5)	Insert Name(s) of Inventors	(1) Takaaki KISIGAMI
()		(2) Takashi FUKAGAWA
		(3) Yasuaki YUDA
		(4) Keiji TAKAKUSAKI
		(5) Shoji MIYAMOTO
		In consideration of the sum of ten dollars (\$10.00) and other good and valuable considerations paid to each of the undersigned, the receipt of which is hereby acknowledged, each of the undersigned agrees to assign, and hereby does assign, and set over to
(6)	Insert Name of Assignee	(6) Matsushita Electric Industrial Co., Ltd.
(T)	Insert Address of Assignee	(7) 1006, Oaza Kadoma, Kadoma-shi, Osaka, 571-8501, Japan
		(hereinafter designated as the Assignee) the entire right, title and interest owned by the undersigned for the United States, its territories, dependencies and possessions, in the invention known as (8) RADIO COMMUNICATION DEVICE AND ARRIVAL
(8)	Insert Identification of Invention,	(0)
	such as Title, Case Number or	DIRECTION ESTIMATION METHOD
	Foreign Application Number	
		for which the undersigned has filed or will file a provisional application, or for which undersigned has executed a non-provisional application for patent in the United States of America
(9)	Insert Date of Signing	(9) on April 25, 2003
	of Application	
(10)	Alternative Identification	(10) U.S. Application Number
	for Filed Applications	filed
		and each of the undersigned also agrees to assign, and hereby does assign, transfer and set over to said assignee all provisional and non-provisional applications for patent and any original and reissued Letters Patent of the United States granted for said invention and any divisions, reissues, continuations and extensions thereof and in and to any Letters Patent that may be granted thereon, including the subject matter of any and all claims which may be obtained in every such patent.

- 1) Each of the undersigned agrees to execute all papers in connection with the application and any continuing or divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient or
- essential to its full protection and title in and to the invention hereby transferred. 2) Each of the undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division or re-issue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going
- 3) Each of the undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.
- 4) Each of the undersigned agrees to communicate to the Assignee or representatives thereof any facts known to him or her respecting the invention and improvements thereof, and will, upon request, but without expense to him or her, testify in any legal proceedings regarding the invention.
- 5) Each of the undersigned hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed and will not execute, any agreement in conflict herewith.
- 6) Each of the undersigned hereby grants the firm of Browdy and Neimark the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.
- This Assignment shall be binding upon the heirs, executors, administrators, and/or assigns of each of the undersigned, and shall inure to the benefit of the heirs, executors, administrators, successors and/or assigns of the Assignee.

In witness whereof, executed by each of the undersigned on the date opposite the name of the undersigned.

forward with such interference.

RECORDED: 07/16/2003

(1)	Date	April	25,	2003	Signature of Inventor	Takaaki KISIGAMI	Jakaaki	Kishisami
(2)	Date	April	25,	2003	Signature of Inventor	Takashi FUKAGAWA	Takashi	Hukasawa
(3)	Date	April	25,	2003	Signature of Inventor	Yasuaki YUDA	Yasuaki	Yuda
(4)	Date	April	25,	2003	Signature of Inventor	Keiji TAKAKUSAKI	Keizi Palu	dusahi
(5)	Date	April	25,	2003	Signature of Inventor	Shoji MIYAMOTO	Shoji mu	jamoto
Date					Witness		0 0	
Date		· · · · · · · · · · · · · · · · · · ·			Witness			

PATENT REEL: 014272 FRAME: 0984