PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SOTARO SHINKAI	09/12/2011
WATARU NOGUCHI	09/12/2011
HIROYUKI YURUGI	09/12/2011
MASAHIKO NAGOSHI	09/12/2011
AKIHIKO SHIOTSUKI	09/15/2011
OSAMU TANAKA	09/12/2011
TOYOSHI YAMADA	09/12/2011
NOBUHIKO ARASHIN	09/12/2011

RECEIVING PARTY DATA

Name:	Panasonic Corporation	
Street Address:	1006 Oaza Kadoma, Kadoma-shi	
City:	Osaka	
State/Country:	JAPAN	
Postal Code:	571-8501	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13142385

CORRESPONDENCE DATA

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: Panasonic Patent Center

Address Line 1: 1130 Connecticut Ave., N.W., Suite 1100 Washington, DISTRICT OF COLUMBIA 20036 Address Line 4:

REEL: 027022 FRAME: 0001

PATENT

NAME OF SUBMITTER: Kazuko NAKAGAWA Total Attachments: 2

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PATENT REEL: 027022 FRAME: 0002

Panasonic Ref*: _	P05276501	Application Serial No	13/142385	
Japan Firm Name:	A & P	Japan Firm Ref:	556712	
US Firm Name*: _	WLP	 US Firm Ref:	2011-0913A	
Chamber La Cilla B				

ASSIGNMENT

WHEREAS, the undersigned has (have) invented the invention entitled:

ARRAY ANTENNA APPARATUS INCLUDING MULTIPLE STEERABLE ANTENNAS			
E OF SURROUNDING M	ETAL COMPONENTS		
J.S. patent application (check on	ly one box below)		
(a)□ for which an application for U.S. patent has been executed by the undersigned concurrently herewith, or			
(b) for which an application for U.S. patent has been executed on the following date(s): (if Declaration & Assignment are signed on the same day, check (a) and make no entry in the blank, if the Declaration was signed before this Assignment, enter the date(s) on which you signed the Declaration)			
PCT Application No.	PCT/JP2009/004025	and,	
2. For use when signing Declaration after filing U.S. patent application			
Application Filing Date		and,	
	E OF SURROUNDING M U.S. patent application (check on by the undersigned conc on the following date(s):_ the Declaration was signed before this Assi PCT Application No. In after filing U.S. patent applicable	E OF SURROUNDING METAL COMPONENTS U.S. patent application (check only one box below) by the undersigned concurrently herewith, or on the following date(s): the Declaration was signed before this Assignment, enter the date(s) on which you signed the Declaration PCT/JP2009/004025 In after filing U.S. patent application	

WHEREAS, Panasonic Corporation of 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, JAPAN, and

its/their heirs, successors, legal representatives and assigns (hereinafter designated as "Assignee(s)") is/are desirous of acquiring the entire right, title, and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sell, assign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention in the United States of America, its territories, dependencies and possessions (hereinafter designated8 as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said invention, including provisionals, non-provisionals, conversions, divisions, continuations, continuations-in-part and reissues thereof in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patent(s), including all renewals, extensions, reissues and reexamination certificates which may be granted therefore, and all rights to sue for past and future infringement thereunder, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this application and any and all Related Applications thereof, all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements, all papers necessary in connection with any interference which may be declared concerning this application or any and all Related Applications thereof and to cooperate with the Assignee(s) in every way possible in obtaining and producing evidence and proceeding with such interference, and for any and all litigations regarding, or for the purpose of protecting the right, title and interest in and to said invention, this application and any and all Related Applications or Letters Patent(s) therefore, and to testify in any legal proceeding relating thereto and in support thereof, for the benefit of Assignee(s), and also to execute separate assignments in connection with such applications as the Assignee(s) may deem necessary or expedient.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by the undersigned if this Assignment had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(s) and hereby covenants that the undersigned has (have) full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, and will not execute, any assignment, sale, agreement or encumbrances in conflict herewith.

The undersigned hereby does sell, assign and transfer unto said Assignee(s) the full and exclusive authority for revoking power of attorney(s) executed by the undersigned in connection with this application and for appointing a new power of attorney in place thereof. The undersigned hereby grant(s) the Assignee(s) and the appointed U.S. patent attorneys and agents 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 U.S. Patent Office for recordation of this document.

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within the United States.

IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

Box2	(Each Inventor, please Sign and Date b	elow)	
	(e) First Name, Last Name	(f) Signature	(g) Date signedi
(1)	Sotaro SHINKAI	Lotaro Shinkai	Sep. 12, 2011
(2)	Wataru NOGUCHI	Watern Noguchi	Sep. 12_2011.
(3)	Hiroyuki YURUGI	Idirogehi Yumgi	Month, Date, Year Sep. 12. 2011.
(4)	Masahiko NAGOSHI	masahiko Nojeshi	Pep./2-2011

■ Check if additional paper(s) is/are attached. Total of ____ pages are submitted.

ASSIGNMENT (Cont.)

Additional Inventors:

13/142385

Box2	(Continued)		
	(e) First Name, Last Name	(f) Signature	(g) Date signed
(5)	Akihiko SHIOTSUKI	Akihiko Shlotsuki Osamu Fanaha Foyoshi Zanada Nobuhiko Arashin	Month, Date, Year Sep. (5, 201/ Month, Date, Year
(6)	Osamu TANAKA	Osamu Fanaha	Sep 12 2011
(7)	Toyoshi YAMADA	Toyorki Zanada	Sep. 12.2011
(8)	Nobuhiko ARASHIN	Nobushike Arashin	Nep /1_ 10 (/
(9)			
(10)			Month, Date, Year
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(19)			Month, Date, Year
(20)			Month, Date, Year
(21)			Month, Date, Year
	<u> </u>		Month, Date, Year
(22)			

[■] Check if additional paper(s) is/are attached. Total of 2 pages are submitted.

PATENT REEL: 027022 FRAME: 0004