PATENT ASSIGNMENT

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NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Kazunari YOKOMAKURA	02/13/2012
Yasuhiro HAMAGUCHI	02/13/2012
Hiroki TAKAHASHI	02/13/2012
Jungo GOTO	02/13/2012
Osamu NAKAMURA	02/13/2012
Shinsuke IBI	02/13/2012
Seiichi SAMPEI	02/13/2012
Shinichi MIYAMOTO	02/13/2012

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13393055

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PATENT REEL: 027784 FRAME: 0510

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NAME OF SUBMITTER: Charles Gorenstein

Total Attachments: 3

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> PATENT REEL: 027784 FRAME: 0511

ATTORNEY DOCKET NO.

1152-0403PUS1

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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ASSIGNMENT

Application No.	13/393,055	Filed	February 28, 2012
Insert Name(s) of Inventor(s)	***(Given Name FAN	AILY NAME (ALL CAI	PS))***
of Inventor(s)	WHEREAS, Kazunari YOKOMAKU GOTO, Osamu NAKAMURA, Shinsuk designated as the undersigned) has (hav	e IBI, Seiichi SAMP	IAGUCHI, Hiroki TAKAHASHI, Jungo EI and Shinichi MIYAMOTO (hereinafter w and useful improvements in:
Insert Title of Invention	WIRELESS COMMUNICATION SY: AND COMMUNICATION METHOD	STEM, BASE STA	TION APPARATUS
	for which an application for Letters Pa undersigned (except in the case of a pro	tent of the United St visional application)	ates of America has been executed by the
Insert Date of Signing of	on Februa	ary 13, 2012	and
Application Insert Name of Assignee(s)	WHEREAS, (1) SHARP KABUSHIKI KAISHA (2) OSAKA UNIVERSITY		
Insert Address of Assignee(s) CHECK BOX IF APPROPRIATE	of (1) 22-22, Nagaike-cho, Abeno-ku, Osak (2) 1-1, Yamadaoka, Suita-shi, Osaka 5t Its(their) heirs, successors, legal represe	65-0871 Japan entatives and assigns right, title and interest	(hereinafter designated as the Assignee(s)) tin and to said invention and in and to any
ir AFROINIAIL	paid, the receipt of which is hereby a undersigned has (have) sold, assigned transfer unto said Assignee the full an America, its territories, dependencies a any and all Letters Patent(s) which is	acknowledged, and on and transferred, and dexclusive right to and possessions and there are be granted there	ollars (\$10.00) to the undersigned in hand ther good and valuable consideration, the d by these presents does sell, assign and the said invention in the United States of the entire right, title and interest in and to efor in the United States of America, its bove is designated, in any and all foreign
	and to any and all divisions, reissues, term or terms for which the same may be	continuations, conve be granted.	ersions and extensions thereof for the full

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Attorney Docket No. 1152-0403PUS1

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree (s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

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

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee(s), as Assignee(s) of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP 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 and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	February 13, 2012,	Name of Inventor Cazunava Guseomufelita	
Date .		(signature) Kazunari YOKOMAKURA	
Date _	February 13, 2012,	Name of Inventor (signature) Yasuhiro HAMAGUCHI	
Date _	February 13, 2012,	Name of Inventor Washi Takahashi (signature) Hiroki TAKAHASHI	
Date .	February 13, 2012,	Name of Inventor Jungo GOTO Jungo GOTO	
Date	February 13, 2012,	Name of Inventor Osamu NAKAMURA (signature) Osamu NAKAMURA	
Date	February 13, 2012,	Name of Inventor Skinnake Skir (signature) Shinsuke IBI	

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Date February 13, 2012,

Name of Inventor

Date February 13, 2012,

Name of Inventor Shinishi Miyamoto (signature) Shinishi MIYAMOTO

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RECORDED: 02/29/2012

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