10-07-2004

Form PTO-1595 (Rev. 06/04) OMB No. 0651-0027 (exp. 6/30/2005)

Shuuji MATSUURA Name: Internal Addre Street Address Additional name(s) of conveying party(ies) attached? Yes	Sharp Kabushiki Kaisha ss: aike-cho, Abeno-ku			
Shuuji MATSUURA Name: Internal Addre Street Address Additional name(s) of conveying party(ies) attached? Yes	Sharp Kabushiki Kaisha ss: s: aike-cho, Abeno-ku ska-Shi			
Execution Dates: July 20, 2004 Additional name(s) of conveying party(ies) attached? Yes X No 3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name Name: Internal Address 22-22, Naga Osaka, Osa JAPAN City:	ss: s: aike-cho, Abeno-ku aka-Shi			
Execution Dates: July 20, 2004 Additional name(s) of conveying party(ies) attached? Yes X No 3. Nature of Conveyance:	s: aike-cho, Abeno-ku aka-Shi			
Additional name(s) of conveying party(ies) attached? Yes	aike-cho, Abeno-ku ika-Shi			
3. Nature of Conveyance: X Assignment Merger Security Agreement Change of Name City:	ıka-Shi			
X Assignment Merger Security Agreement Change of Name City:				
Government Internet Assignment				
Government Interest Assignment State:				
Executive Order 9424, Confirmatory License Country:	Zip:			
Other Additional name attached:	ne(s) & address(es) Yes X No			
4. Application or patent number(s):	being filed together with a new application.			
A. Patent Application No.(s) B. Patent No.((s) Q-2Q-17/			
NEW	9 0709			
Additional numbers attached? Yes 5. Name and address to whom correspondence concerning document should be mailed: 6. Total number patents invo	$\begin{array}{c c} & 9 - 39 - 84 \\ \hline & \times \text{No} & 10951763 \\ \hline & \text{or of applications and} & 1 \end{array}$			
Name: Charles Gorenstein BIRCH, STEWART, KOLASCH & BIRCH, LLP 7. Total fee (37	7 CFR 1.21(h) & 3.41) \$ 40.00			
Internal Address: Atty. Dkt.: 0033-0943PUS1 Author	rized to be charged by credit card			
Street Address: 8110 Gatehouse Rd	rized to be charged to deposit account			
Suite 100 East P.O. Box 747	sed			
	equired (government interest not affecting title)			
City: Falls Church 8 Payment Inf				
. Taylor III				
State: VA Zip: 22040-0747 a. Credit Card Phone Number: (703) 205-8000	Last 4 Numbers Expiration Date			
7700,005,0050	·			
	b. Deposit Account Number Authorized User Name			
9. Signature. Signature Signature	PZ September 29, 2004 Date			
	Total number of pages including cover			
Name of Person Signing CG/DSS/sm	sheet, attachments, and documents:			

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BIRCH, STEWART, KOLASCH & BIRCH, LLP

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ATTORNEY DOCKET NO. 0033-0943PUS1

2004

ASSIGNMENT

	Ap	oplication No. <u>NEW</u>	Filed <u>September 29</u> ,				
Insert Name(s) of Inventor(s)	-	WHEREAS, Shuuji MATSUURA					
Insert Title		ereinafter designated as the undersigned) has (have) in eceiver Device Having Improved Sele	ectivity Characteristics				
		which an application for Letters Patent of the United (cept in the case of a provisional application).	States of America has been executed by the undersigned				
Insert Date of Signing of Application	→ on	July 20, 200) 4 ; and				
Insert Name of Assignee	sert Name WHEREAS, Sharp Kabushiki Kaisha						
Insert Address of Assignee	of	22-22, Nagaike-cho, Abeno-l	ku, Osaka-shi, Osaka, Japan				
CHECK BOX IF APPROPRIATE	acc ma		hereinafter designated as the Assignee) is desirous of aid invention and in and to any Letters Patent(s) that ca and				
	has Ass dej wh:	ed, the receipt of which is hereby acknowledged, and or s (have) sold, assigned and transferred, and by the signee the full and exclusive right to the said inven pendencies and possessions and the entire right, titl	n of Ten Dollars (\$10.00) to the undersigned in hand ther good and valuable consideration, the undersigned ese presents does sell, assign and transfer unto said ation in the United States of America, its territories, le and interest in and to any and all Letters Patent(s) America, its territories, dependencies and possessions, ign countries;				
		d to any and all divisions, reissues, continuations, coms for which the same may be granted.	inversions and extensions thereof for the full term or				

PATENT REEL: 015853 FRAME: 0710 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 and to vest all rights therein hereby conveyed to said Assignee 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, as Assignee 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 July 20, 2004	Name of Inventor	5	Lunga	Matsuura		
		(signature)	Shuuji	MATSUURA		
Date,						
		(signature)				
Date,	Name of Inventor					
		(signature)				
Date,	Name of Inventor					
		(signature)				
Date,	Name of Inventor					
		(signature)				
Date,	Name of Inventor					
		(signature)			-	

RECORDED: 09/29/2004

PATENT REEL: 015853 FRAME: 0711