BOX ASSIGNMENTS

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USE FOR TRADEMARKS

	RECORDATE PATENT APPL.				
TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS:					
SIR: PLEASE RECORD THE	ATTACHED ORIGINA	L DOC	UMENTS OR COPY T	HEREOF.	
<ol> <li>NAME OF CONVEYING PA</li> </ol>	ARTY(IES) (ASSIGNOI	R(S)):			- 22 <b>- 2</b>
1. HORIUCHI, Takahiko			5.		46
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ADDITIONAL NAME(S) OF CO	ONVEYING PARTY(IES	S) ATT	ACHED? YES	XNO	
2. PARTY(IES) (ASSIGNEE(S	**		>0 LTD		
NAME: TSUKUBA, S	OFTWARE LABORAT	ORY	30., LTD.		
ADDRESS: 1089-1	1, Heta, Ooaza, Iwai c	ity, Iba	ıraki, Japan		
ADDITIONAL NAME(S) & ADD	DRESS(ES) ATTACHE	D?	YES	х	]NO
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New Appla. 25	5044				
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Attorney: Glenn J. Perry  Reg. No. 28,458  Date: July 23, 1998					
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## ASSIGNMENT OF NONPROVISIONAL APPLICATION

NONPROVISIONAL

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n lavana	(1) Takahiko Horiuchi	(4)	
INSERT NAME(S) OF	(2)	(5)	
INVENTOR(S)	(3)		x if continued on page 2
the receipt and assign(s) and tr	sufficiency of which are hereby acknow ansfer(s) unto:		ed who at the request of, hereby sell(s).
INSERT NAME(S) OF ASSIGNEE(S) & ADDRESS(ES)	TSUKUBA SOFTWARE LABO 1089-11, Heta, Ooaza,	RATORY CO., LTD Iwai City, Iba	
U.S.C. 100, in t	signated "ASSIGNEE") the entire right, he invention and all applications includ resulting patents, known as	title and interest for the Uing any and all divisions, o	nited States of America as defined in 35 continuations, substitutes, and reissues
TITLE OF INVENTION	COMMUNICATION APPARATUS AN	D METHOD OF COLOR	PICTURES AND
invention.	CONTINUALLY-CHANGING TONE	PICTURES	Patent of the United States of America.
assigns and leg hereinafter act o successors, ass title in and to the NOTE→→	AND the undersigned hereby authorizes to issue said Letters Patent to the said als representatives, the undersigned are behalf of said ASSIGNEE; AND the undersigned hereby agree(saigns and legal representatives, deeme invention hereby transferred. The undersigned hereby authorize(s) on & Sutro, of the above address to ins	gree(s) that the attorney c s) to testify and execute a d essential by ASSIGNEI Cushman Darby & Cush	of record in said application shall  ny papers for ASSIGNEE, its E to ASSIGNEE'S full protection and  man Intellectual Property Group of
	INVENTOR(S)	DATE SIGNED	WITNESSES
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1) Name: Taka	hike Horiuchi	12 June 1278	Name: Rieko Horiuchi
2)	arrive horracti		Name: Rieko Horiuchi
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IF ADDITIONA	LINVENTORS, check box and co	intinue on page 2.	

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## RECORDATION FORM COVER SHEET PATENTS ONLY

111	S. DEPARTMENT OF COMMERCE
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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies 1. Name of conveying party(ies): Yoshiki Nishibayashi Name: Sumitomo Electric Industries, Ltd. Additional name(s) of conveying Address: 5-33, Kitahama 4-chome, Chuo-ku parties attached? - D Yes x No Osaka-shi, Osaka 541, Japan 3. Nature of conveyance: x Assignment Merger □ Security Agreement □ Change of Name 0 Other Execution Date(s): 7/20/98 Additional name(s) & address(es) attached? □ yes x no 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: (Date) 7/20/98 A. Patent Application No.(s) B. Patent No.(s) 6. Total number of applications and patents 5. Name and address of party to whom correspondence concerning document involved (number) 1 should be mailed: 7. Total fee (37 CFR 3.41):.....\$ 40 Beveridge, DeGrandi, Weilacher & Young, L.L.P. 1850 M Street, N.W. M Enclosed Suite 800 Washington, DC 20036 Charge to deposit account Attorney Docket No. 06-55002 8. Deposit account number: 02-4300 (Attached duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 07/27/1998 IGRTIS 00000030 09120453 FC:500 the best of my kapped sige and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Robert G. Weilacher Signature Date Name of Person Signing Reg. No. 20531 Total no. of pages (including cover sheet, attachments & documents): 3

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## **ASSIGNMENT**

This assi	gnn FO	nent agreement is applicable to an invention or SEMICONDUCTORS AND MANUFACTURING	PROCESS THEREOF
The PAT	ENT	RIGHTS referred to in this agreement are:	
(check one)	Þ	a patent application for this invention, exe	cuted by the ASSIGNOR(S)
	,	concurrently with this assignment.	•
		U.S. patent application Serial No.	, filed
		a ever perent approaries added on to, inte	
		No filed on (date) application Serial No, if known	(U.S. patent
	г	II S natent No issued	JVVII).
The PAT	FNT	U.S. patent No, issued RIGHTS also include all divisions, reissues	continuations and extensions of
		patent applications identified above.	, continuations and extensions of
		RIGHTS assigned under this agreement are	e:
		U.S. patent rights only.	
		Worldwide patent rights. In this case, the	assignee shall have the right to
		claim the benefit of the filing date of any l	J.S. or foreign patent application
		for this invention.	
		OR(S) referred to in this agreement is (or a	
-		ar on page 2 of this Assignment and any Su	upplemental Sheet(s).
		EE referred to in this agreement is:	
		nee) Sumitomo Electric Industries, L	
(Address) 5	<u>33,</u>	Kitahama 4-chome, Chuo-ku, Csaka-	-sni, Usaka,541-0041 Japan
The ASSIGN	EE	S:	
(check one)		An Individual.	
		A Partnership.	
	DX A	A Corporation of <u>Japan</u>	(specify state or country)
		(other)	
The ASS	:IGN	OR(S), in consideration of \$10.00 paid by t	the ASSIGNEE and other good
		nsideration, receipt of which is acknowledg	
		SIGNEE, its successors and assigns:	cd, hereby assign(s) the following
•		exclusive right to the invention;	
		the parties and interest in and to the PATENT	RIGHTS:
	_	sue and recover for any past infringement;	· ·
		claim priority under 35 USC 119, 35 USC 1	
		pased on any earlier patent applications for	

PATENT REEL: 9341 FRAME: 0963

## THIS IS PAGE 2 OF AN ASSIGNMENT FROM THE INVENTOR(S) TO

ASSIGNEE: Sumitomo Electric Industries, Ltd.

INVENTION TITLE: HEAT SINK FOR SEMICONDUCTORS AND MANUFACTURING PROCESS

THEREOF

As to all U.S. patent applications assigned under this agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue all Letters Patent to the ASSIGNEE as the assignee of the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE, its successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE, or its representatives, any facts known to the ASSIGNOR(S) respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause any and all Letters Patent to be issued to said ASSIGNEE, make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention.

The ASSIGNORS authorize any attorneys and agents who have a power of attorney in this application to check any appropriate boxes and to insert the Serial Number and filing date in this document after it has been executed.

Yoshiki Nishibayashi	Joshiki Rishibayashi	Jul. 20. 1998
Name of sole or first inventor	Signature	Date
Name of second inventor, if any	Signature	Date
Name of third inventor, if any	Signature	Date
Name of fourth inventor, if any	Signature	Date
Name of fifth inventor, if any	Signature	Date
Name of sixth inventor, if any	Signature	Date
Name of seventh inventor, if any	Signature	Date
Name of eighth inventor, if any	Signature	Date
Name of ninth inventor, if any	Signature	Date

• 1987, 1992 Beveridge, DeGrandi, Weilacher & Young RECORDED: 07/23/1998

PATENT

REEL: 9341 FRAME: 0964