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FORM PTO-1595 (modified) (Rev 6-93)	RE	03-08-20	05	\ SHEET	U.S. DEPARTMENT	OF COMMERCE nt and Trademark Office
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To the Director of the United S		10295456			nal documents or co	pies thereof.
Name of conveying party(ies	5):		2. Name and	address of rece	eiving party(ies):	
Reiko YOSHIMURA Osamu TADA Koji IZUNOME Kazuhiro KASHIMA	MA	AR 0 3 2005	5-25, Ni	BA CERAMICS shi-shinjuku u-ku, Tokyo	7-chome	
Additional conveying party(ies)		NO				
Nature of conveyance:		NO				
ASSIGN	IMENT					
Execution Date:	26 2005		Additional na	me(s)-& address	s(os) attached?	NO
January 4. Application number(s) or pa		er(s)·	Additional hai	me(s)-& address	s(es) allacheu?	NU
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If this is being filed together	with a nev	v application, the exe	cution date of th	he application is	5 :	
A. Patent Application	Number(s	s):	B. P	atent Number(s):	
11/00	2,995					
		Additional number	। ers attached? N C	· ·		
5. Name and address of party		correspondence	T		ns/patents involve	ed: 1
concerning document should	i be maile	a :		37 C.F.R. § 3.4		0.00
Richard L. Schwaal	b		1	_	1). ΨΨ·	3.00
FOLEY & LARDNE			X Check E	Enclosed		
Washington Harbo		00	Charge	to deposit acco	unt	
3000 K Street, N.W. Washington, D.C.	-			count number:	19-0741	
			THIS SPACE			
9. Statement and signature: To the best of my know copy of the original document. be required in this matter to the Richard L. Schwa	The Come above-ide	missioner is hereby a entified deposit accou	uthorized to ch	arge any additio	onal recordation fe	
Name of person signir	ng .		Signature			Date
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		Total number of pag	es including co	ver sheet, attac	hments, and docu	iment: 3
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PATENT REEL: 016324 FRAME: 0306

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and address of assignee

TOSHIBA CERAMICS CO.,LTD. 5-25,NISHI-SHINJUKU 7-CHOME, SHINJUKU-KU,TOKYO,JAPAN

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

title of invention

SEMICONDUCTOR SUBSTRATE

☑ Serial No. 11/002,995

as set forth in this United States Patent Application

check one	arecuted concurrently herewith
	executed on

Filed December 3, 2004

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of FOLEY & LARDNER the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS					
Name:	Reiko YOSHIMURA	Signature: Reihi Gookimurii	Date: January 26		
Name:	Tsukasa T.T. Obamu TADA January 26, 2005	Signature: Toulonsa Inda	Date 2005		
Name:	Koji IZUNOME	Signature:	Date:		
Name:	Kazuhiko KASHIMA	Signature:	Date:		
NAMES AND SIGNATURES OF WITNESSES					
Name:		Signature:	Date:		
Name:		Signature:	Date:		

Note: Prima facie evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

PATENT REEL: 016324 FRAME: 0307

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and address of assignee

TOSHIBA CERAMICS CO.,LTD. 5-25,NISHI-SHINJUKU 7-CHOME, SHINJUKU-KU,TOKYO.JAPAN

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to this invention relating to

title of invention

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SEMICONDUCTOR SUBSTRATE

as set forth in this United States Patent Application	
	are executed concurrently herewith
	D executed on

X Serial No. <u>11/002,995</u> Filed <u>December 3,2004</u>

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

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NAMES AND SIGNATURES OF INVENTORS					
Name: Reiko YOSHIMURA	Signature:	Date:			
Name: XOSSAMO TADA	Signature:	Date:			
Name: Koji IZUNOME	Signature: Koji Izunome	Date: January 26			
Name: Kazuhiko KASHIMA	Signature: Vashita/C.	Date January 26,			
NAMES AND SIGNATURES OF WITNESSES					
Name:	Signature:	Date:			
Name:	Signature:	Date:			

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PATENT RECORDED: 03/03/2005 REEL: 016324 FRAME: 0308