

12-12-2006



Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/20					
103347669 Attorney Docket No. 501.32328X00					
To the Honorable Commissioner or Patents and Trademarks: Please record the attached original documents or copy thereof.					
1. Name of conveying party(ies): Manabu TSUNOZAKI, Kyoko ISHII, Koichi NOZAKI, Hiroshi YOSHIOKA, Yoshihisa KOYAMA, Shinji UDO, Hidetomo AOYAGI, Sinichi MIYATAKE, Makoto MORINO, Akihiko HOSHIDA	Name and address of receiving party(ies)     Name: (1) Hitachi, Ltd.     6, Kanda Surugadai 4-chome,     Chiyoda-ku, Tokyo, Japan				
Additional name(s) of conveying party(ies) attached?   Yes  No	(2) Hitachi VLSI Engineering Corp. 5-20-1, Josuihon-cho, Kodaira-shi, Tokyo, Japan				
3. Nature of conveyance/ Execution Date: October 1, 1993; Oct. 1, 1993; Oct. 1, 1993.	(3) Hitachi Hokkai Semiconductor, Ltd. 145, Aza Nakajima, Nanae-cho, Kameda-gun, Hokkaido, Japan				
	Additional name(s) & address(es) attached? ☐ Yes ☒ No				
Application number(s) or patent number(s):	This document is being filed together with a new application,				
A. Patent Application No.(s)	B. Patent Registration No.(s)				
08/109,071	5,440,521				
Additional number(s) attached ☐ Yes ☐ No					
<ol><li>Name and address of party to whom correspondence concerning document should be mailed:</li></ol>	6. Total number of applications and patents involved 1				
Name: ANTONELLI, TERRY, STOUT & KRAUS, LLP  Internal Address:	7. Total fee (37 CFR 3.41)\$80.00  ☐ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account ☐ Enclosed ☐ None required (government interest not affecting title)				
1300 NORTH 17 <sup>TH</sup> STREET – SUITE 1800					
City: ARLINGTON State: VA Zip 22209  Phone Number: (703) 312-6600  Facsimile Number: (703) 312-6666  Email Address: email@antonelli.com	8. Payment Information:  a. Credit Card Last 4 numbers: Expiration date:  b. Deposit account number: 01-2135				
	Authorized User Name:				

**PATENT** 

**REEL: 018679 FRAME: 0315** 

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Larry N. Anagnos, Reg#32,392

Name of Person Signing

December 7, 2006

Date

Total number of pages including cover sheet, attachments, and document:

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

**PATENT** 

**REEL: 018679 FRAME: 0316** 

FORM PTO-1596 (Rev. 6-93) OMB No. 0651-0011 (e 20-58/ CORDATION FORM COVER 5" 'EET

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

## PATENTS ONLY

501.32328X00

Tab settings □ □ □ ▼ ▼ ▼ ▼	<b>Y</b>	▼	<u> </u>	<u> </u>
To the Honorab Complete of Patents and Trademarks:	Please record the atta	ached original do	ocuments or copy the	ereof.
Manabu Tsunozaki, Kyoko Ishii, Koichi Nozaki, Hiroshi Yoshioka, Yoshihisa Koyama, Shinji Udo Additional name(s) of conveying party(ies) attached? X Yes D No	Name: En	tahi, Ltd Igineering kkai Semi	iving party(ies)  1, Hitachi Corp. and Conductor,	<u>Hitachi</u>
3. Nature of conveyance:  Assignment	Tokyo, J Nanae-ch <b>業業業業業業</b>	ess: Chiyoda Josuihon- Japan; and Jo, Kameda XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	da Surugadai a-ku, Tokyo, cho, Kodaira 145, Aza Na gun, Hokkaio ************************************	Japan; a-shi, akajima, do, Japa
4. Application number(s) or patent number(s):				
If this document is being filed together with a new applicatio	n, the execution da	te of the applic	ation is:	
A. Patent Application No.(s)  Serial No. 08/109,071  Filed: August 19, 1993  Additional numbers at	B. Patent N			
3. Name and address of party to whom correspondence concerning document should be mailed:	6. Total numbe	r of applications	and patents involve	ed: 1
Name: Antonelli, Terry, Stout & Kraus	7. Total fee (37	7 CFR 3.41)	\$ 80.00	
Internal Address:	₺ Enclosed Addit &/Authoriz	ional fee	ຣ <b>ະ</b> ed to deposit accoເ	unt H
Street Address: 1300 North Seventeenth St. Suite 1800	8. Deposit acc			325
City: Arlington State: Va. ZIP: 22209	(Attach duplica	te copy of this pag	ge if paying by deposit a	account)
DO NOT US	E THIS SPACE		9186113	2
9. Statement and signature.  To the best of my knowledge and belief, the foregoing inform the original document.  Larry N. Anagnos	nation is true and co	orrect and any	Oct. 5,	1994
Name of Person Signing Reg. No. 32,392 Total number of pages including	Signature/ cover sheet, attachmen	/ nts, and document		ate

**REEL: 018679 FRAME: 0317** 

Continuation of Information in Item 1:

Hidetomo Aoyagi, Sinichi Miyatake, Makoto Morino and Akihiko Hoshida

RELT 156 FRANC 326

PATENT REEL: 018679 FRAME: 0318 For good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, as a below named inventor, I hereby sell and assign to Hitachi, Ltd., Hitachi VLSI Engineering Corp. & of Chiyoda-ku, Tokyo, Japan, Kodaira-shi, Tokyo, Japan & Kameda-gun, Hokkaido, Japan its successors and assigns or other legal representatives all my rights, title and interest, in and for the United States of America, in and to

SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE, U.S. Serial No. 08/109,071 filed on August 19, 1993

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed by me even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the

entire ownership of the said Letters Patent when granted, to be held and enjoyed by said Hitachi, Ltd.,
Hitachi VLSI Engineering Corp. &
itachi Hokkai Semiconductor, Ltd., its sucessors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment and sale had not been made;

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

And I do hereby authorize and request the Commissioner of Patents to issue said Letters Patent to said

Hitachi, Ltd., Hitachi VLSI Engineering Corp. &

Hitachi Hokkai Semiconductor, Ltd.

	(Full Name) (Signature)
1)	Date October 1, 199 Aventor Manabu TSUNOZAKI
,	Date October 1, 199 Aventor Manabu TSUNOZAKI  Same as Post Office Address  Residence  Citizenship Japan
	Post Office Address 5-22-3, Josuihon-cho, Kodaira-shi, Tokyo, Japan
2)	Date October 1, 1993 Inventor Kyoko ISHII Kyolet Islum
	Residence Same as Post Office Address Citizenship Japan
	Post Office Address 1-2-43, Sakae-machi, Hamura-shi, Tokyo, Japan
3)	Date October 1, 1993Inventor Koichi NOZAKI Kiich: Nizaka
	Residence Same as Post Office Address Citizenship
	Date October 1, 1993 Inventor Koichi NOZAKI Kiich: Wizelen  Residence Same as Post Office Address Citizenship  Post Office Address 1-23-10, Kitasakae, Chitose-shi, Hokkaido, Japan
	DateOctober 1, 1993 Inventor Hiroshi YOSHIOKA Viroshi Yoshickin
,	Residence Same as Post Office Address Citizenship Japan
	Post Office Address 1-9-32-106, Tanaka-cho, Akishima-shi, Tokyo, Japan
5)	Date October 1, 1993 Inventor Yoshihisa KOYAMA Takhir. Kuyumum Residence Same as Post Office Address Citizenship Japan
	Residence Same as Post Office Address Citizenship Japan
	Post Office Address 5-8-2-201, Matsubara-cho, Akishima-shi, Tokyo, Japan
	All) 2) Bon My Air 4) Many Murenter

PATENT REEL: 018679 FRAME: 0319

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For good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, as a below named inventor, I hereby sell and assign to Hitachi, Ltd., Hitachi VLSI Engineering Corp. & of Chiyoda-ku, Tokyo, Japan, Kodaira-shi, Tokyo, Japan & Kameda-gun, Hokkaido, Japan its successors and assigns or other legal representatives all my rights, title and interest, in and for the United States of America, in and to

SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE, U.S. Serial No. 08.109,071 filed on August 19, 1993

invented by me (if only one is named below) or us (if plural inventors are named below) and described in the application for United States Letters Patent therefor, executed by me even date herewith, and all United States Letters Patent which may be granted therefor, and all divisions, continuations and extensions thereof, the said interest being the entire ownership of the said Letters Patent when granted, to be held and enjoyed by said Hitachi, Ltd., Hitachi VLST Engineering corp. & itachi Hokkai Semiconductor, Ltd., its successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed

And I hereby agree to sign and execute any further documents or instruments which may be necessary, lawful, and proper in the prosecution of the above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reviewed or reissue applications or in any amendment, extension, or interference proceedings, or otherwise to secure the title thereto in said assignee;

1) Date October 1, 1993 Inventor Shinji UDO Same as Post Office Address \_Citizenship\_ Post Office Address 1-9-32-205, Tanaka-cho, Akishima-shi, 2) DateOctober 1, 1993Inventor Hidetomo AOYAGI Same as Post Office Address \_ Citizenship. Post Office Address 519-18-102, Miyazawa-cho, Akishima-shi, 3) DateOctober 1, 1993Inventor Sinichi MIYATAKE Same as Post Office Address Japan Citizenship Post Office Address 1917-1-301, Hane, Hamura-shi, Tokyo, Japan Date October 1, 1993 Inventor Makoto MORINO Same as Post Office Address Citizenship. Post Office Address 5-5-7, Mihori-cho, Akishima-shi, Tokyo, Japan 5) Date October 1, 1993 Inventor Akihiko HOSHIDA Residence Same as Post Office Address Post Office Address 1658-1, Kumagawa, Fussa-shi, Tokyo, Japan

2) Turkide SUZUKI 4) Hidetoski miyourhi

PATENT REEL: 018679 FRAME: 0320

**RECORDED: 12/07/2006** 

Witness(es)

by me or us if this assignment and sale had not been made;