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(11/02/2005), Hiroaki SAITO (11/02/2005),	Name: SANYO ELECTRIC CO., LTD.
Masahito ONDA (11/02/2005), Additional name(s) of conveying party(ies) attached? X Yes No	Internal Address:
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3. Nature of conveyance/Execution Date(s):	2-5-5, Keihanhondori Moriguchi-shi, Osaka
Execution Date(s): in parentheses after inventor name	570-8677
x Assignment Merger Change of Name	JAPAN
Security Agreement Joint Research Agreement	City:
Government Interest Assignment	State:
Executive Order 9424, Confirmatory License	Country: Zip:
Other	Additional name(s) & address(es) Yes X No
	attached:
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4. Application or patent number(s):	This document is being filed together with a new application.
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A. Patent Application No.(s) 11/230,538 Additional numbers attached Name and address to whom correspondence concerning document should be mailed: Iame: Barry E. Bretschneider MORRISON & FOERSTER LLP Internal Address: Atty. Dkt.: 492322029600	B. Patent No.(s) Per X No 6. Total number of applications and patents involved:
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A. Patent Application No.(s) 11/230,538 Additional numbers attached Name and address to whom correspondence concerning document should be mailed: lame: Barry E. Bretschneider MORRISON & FOERSTER LLP nternal Address: Atty. Dkt.: 492322029600 treet Address: 1650 Tysons Blvd, Suite 300	8. Patent No.(s) 7. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting the
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A. Patent Application No.(s) 11/230,538 Additional numbers attached Name and address to whom correspondence concerning document should be mailed: Name: Barry E. Bretschneider MORRISON & FOERSTER LLP Internal Address: Atty. Dkt.: 492322029600 Street Address: 1650 Tysons Blvd, Suite 300 Street Address: McLean State: VA Zip: 22102	B. Patent No.(s) 7 Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting till 8. Payment Information a. Credit Card Last 4 Numbers
A. Patent Application No.(s) 11/230,538 Additional numbers attached Name and address to whom correspondence concerning document should be mailed: Iame: Barry E. Bretschneider MORRISON & FOERSTER LLP Internal Address: Atty. Dkt.: 492322029600 Street Address: 1650 Tysons Blvd, Suite 300 Street Address: VA Zip: 22102 Thone Number: (703) 760-7743	B. Patent No.(s) 7 Yes X No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting till 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date
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A. Patent Application No.(s) 11/230,538 Additional numbers attached Name and address to whom correspondence concerning document should be mailed: Name: Barry E. Bretschneider MORRISON & FOERSTER LLP Internal Address: Atty. Dkt.: 492322029600 Street Address: 1650 Tysons Blvd, Suite 300 Dity: McLean City: McLean Chone Number: (703) 760-7743 Fax Number: (703) 760-7777 Email Address: BBretschneider@mofo.com	B. Patent No.(s) 7. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting tit 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number Authorized User Name Barry E. Bretschneider November 30, 2005
A. Patent Application No.(s) 11/230,538 Additional numbers attached Name and address to whom correspondence concerning document should be mailed: Name: Barry E. Bretschneider MORRISON & FOERSTER LLP Internal Address: Atty. Dkt.: 492322029600 Street Address: 1650 Tysons Blvd, Suite 300 City: McLean City: McLean Chone Number: (703) 760-7743 Eax Number: (703) 760-7777 Email Address: BBretschneider@mofo.com Signature:	B. Patent No.(s) 7. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting tit 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number O3-1952 Authorized User Name Barry E. Bretschneider

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Form PTO-1595 RECORDATION FORM COVER SHEET (Continued)				
Additional Conve	ying Party(ies)/Execu	ution Date(s) (1. Continued):		
Satoshi IWATA (11/0	2/2005), and Masamichi	YANAGIDA (11/09/2005)		
Additional Assign	ees (2. Continued):			
Assignee Name:				
Street Address:				
City:	State:	Country:	Zip:	
Assignee Name: Internal Address: Street Address:				
City:	State:	Country:	Zip:	
Internal Address: Street Address:				
City:	State:	Country:	Zip:	
Additional Applica	ations and/or Patents	(4. Continued):		
Additional Patent Applicati 4A. Continued:	on Numbers	Additional Patent Numbers 4B. Continued:		
	Additional numbers	attached? Yes No		

Docket No.: 492322029600

MORRISON & FOERSTER LLP

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby assign(s), transfer(s) and set(s) over to:

SANYO ELECTRIC CO., LTD. 2-5-5, Keihanhondori

Moriguchi-shi, Osaka 570-8677 JAPAN

(hereinafter designated as the "ASSIGNEE"), its successors and assigns, the entire right, title, and interest for the United States in the invention, and all applications for patent and any Letters Patent which may be granted therefor, including said application, and all United States Letters Patent which may be granted thereof, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of said Letters Patent when granted to be held by said ASSIGNEE, its successors, assigns or their 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 and enjoyed by Assignor(s) if this assignment had not been made, the application being known by the title:

SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME

Attorney Docket No.: 492322029600

for which the undersigned has/have executed an application for patent in the United States of America on the same day herewith. Where this instrument is not filed concurrently with the application, the following identifying information may be added after execution:

Filing Date: September 21, 2005 Serial No.: 11/230,538

- 1. The undersigned hereby agree(s) to sign and execute any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-named application or in the preparation and prosecution of any continuing, continuation-in-part, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extension of interference proceedings, or otherwise to secure the title thereto to the ASSIGNEE.
- 2. The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property of similar agreements.
- The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the ASSIGNEE.

va-139025

PATENT REEL: 017293 FRAME: 0044

U.S. Application No. 11/230,538

- 4. The undersigned hereby authorize(s) and request(s) the Commissioner of Patents in the United States to issue any and all Letters Patent resulting from said application or any division or divisions or continuing applications thereof to the said ASSIGNEE.
- 5. The undersigned hereby grant(s) to the firm of Morrison & Foerster 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 United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREBY, executed by the undersigned on the date(s) opposite the undersigned name(s).

2005.11.2	-Hirotoshi Kubo
Date	Typed Name: Hirotoshi KUBO
2005, //, 2 Date	Junichiro Tojo
Date	Typed Name: Junichiro TOJO
2005, 11, 2	Himaki Sairo
Date	Typed Name: Hiroaki SAITO
2005.//.2 Date	Masahito Onda
Date	Typed Name: Masahito ONDA
2005. 11.2 Date	Satoshi Iwata Typed Name: Satoshi IWATA
	Typod Traine, Sawsin TWAIA
	Masamichi Yanagida Typed Name: Masamichi YANAGIDA

Page 2 of 2

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RECORDED: 11/30/2005