Mail Stop: **Assignment Recordation Services** Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

		Attorney Docket No. 136365							
	Please record the attached original document or copy thereof.								
1.	A. Name of conveying party:	A. Name and address of receiving parties:							
	Akihiro HASEGAWA B. Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No	SANYO ELECTRIC CO., LTD. 5-5, KEIHAN-HONDORI 2-CHOME MORIGUCHI-SHI, OSAKA JAPAN							
3.	A. Nature of conveyance: Assignment	SANYO SEMICONDUCTOR CO., LTD. 1-1, SAKATA 1-CHOME, OIZUMI-MACHI ORA-GUN, GUNMA JAPAN B. Additional name(s) & address(es) attached?							
4.	☐ This document is being filed together with a new application.								
	A. Patent Application No.(s)	B. Patent No.(s)							
	Additional numbers atta	l ached? ☐ Yes ☒ No							
	C. Title of Application: SEMICONDUCTOR DEVICE								
5.	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1							
	Name: James A. Oliff	7. A. Total fee (37 CFR 3.41)\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\							
	Address: OLIFF & BERRIDGE, PLC P.O. Box 320850 Alexandria, VA 22320-4850	Credit any overpayment or charge any underpayment to deposit account number 15-0461.							
9.	James A. Oliff, Registration No. 27,075 Jesse O. Collier, Registration No. 53,839	ation is true and correct and any attached copy is a true copy of the copy of							

ASSIGNMENT (Two Assignees)

		(1) Akihiro HASEGAWA	(4)		
(1-8)	Insert Name(s) of Inventor(s)	(2)	(5)		
		(3)			
(9A)	Insert Name of First		f one dollar (\$1.00) and other good and valuable consideration paid ned agrees to assign, and hereby does assign, transfer and set over to		
	Assignee	(9A) SANYO ELECTRIC CO., LTD.			
(10A)	Assignee	(10A) 5-5, Keihan-Hondori 2-chome, Moriguchi-shi, Osaka, Japan			
(9 B)		(9B) SANYO SEMICONDUCTOR C	O., LTD.		
(10B)	Insert Address of Second Assignee	(10B) 1-1, Sakata 1-chome, Oizumi-ma	achi, Ora-gun, Gunma, Japan		
(11)	Insert	representatives, the entire right, title and §100, in the invention, and in all applica provisional, divisional, continuation, into	and Assignee's heirs, successors, assigns and legal interest for the United States of America as defined in 35 U.S.C. ations for patent including any and all provisional, non-ernational, confirmation, substitute and reissue application(s), es and reexamination certificates that may be granted on the		
	Identification, such as Title, Case				
	Number or Foreign Application Number	Attorney Docket No.			
		for which the undersigned has (have) exec	cuted an application for patent in the United States of America on		
(12)	Insert Date of	even date herewith or			
(12)	Signing of	(12)			
	Application	on			
(13)	Alternative Identification for	(13) U.S. Application Serial Number			
	filed applications	filed			
applicati possible provision a grant o Patents o entire intagreemen	ons for the invention, and any pais the Assignees may deem necess 2) Each undersigned agrees to on or continuation or division the in obtaining evidence and going 3) Each undersigned agrees to as of the International Convention 4) Each undersigned agrees to fa valid United States patent to the soft the United States resulting from the United States resulting	stent(s) issuing thereon, and also to execute selectory. Description with such interference. Description of Industrial Property or simil of perform all affirmative acts which may be needed. Description of Industrial Property or simil of perform all affirmative acts which may be needed. Description of Industrial Property or simil of perform all affirmative acts which may be needed. Description of Industrial Property or simil of perform all affirmative acts which may be needed. Description of Industrial Property or simil of the Assignees. Description of Industrial Property or similar acts which may be needed. Description of Industrial Property or similar reaction of the U.S. Description of Industrial Property or similar reaction of Industrial Property or similar reaction of Industrial Property or similar reaction. Description of Industrial Property or similar reaction of In	ith the application and any continuing, divisional or reissue parate assignments in connection with such applications and ith any interference which may be declared concerning this ed thereon, and to cooperate with the Assignees in every way may act which may be necessary in connection with claims or ar agreements. Seessary to obtain, maintain or confirm by reissue or reexamination is. Patent and Trademark Office to issue any and all Letters are or reissue applications to the said Assignees, as Assignees of the ssigned, and that he has not executed, and will not execute, any and his heirs, successors, assigns and legal representatives, are power to insert on this assignment any further identification that tent and Trademark Office for recordation of this document.		
	In witness whereof, executed b	by the undersigned on the date(s) opposite			
Date	March 13, 2008	3 Inventor Signature	Akihiro Hasegawa (SEAL)		
Date			(SEAL)		
Date		Inventor Signature	(SEAL)		
Date		Inventor Signature	(SEAL)		
Date		Inventor Signature	(SEAL)		
then it sh	This assignment should preferab lould be signed before at least two	oly be signed before: (a) a Notary Public if wit o witnesses who also sign here:	thin the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither,		
Date		Witness			
Date		Witness			

PATENT REEL: 020716 FRAME: 0059

ASSIGNMENT (Two Assignees)

		(I) <u>A</u>	kihiro HASEGAWA	(4)	
(1-8)	Insert	(2)		(5)	
	Name(s) of Inventor(s)				
		to each o		of one dollar (\$1.00) and other good and valua gned agrees to assign, and hereby does assign,	
(9A)	Insert Name of First Assignee	(9Δ)	SANYO ELECTRIC CO., LTI) .	
(10A)	Insert Address of First Assignee	(10A) 5-5, Keihan-Hondori 2-chome, Moriguchi-shi, Osaka, Japan			
(9B)	Assignee	(9B)	B) SANYO SEMICONDUCTOR CO., LTD.		
(10B)		(10 B) _	I-1, Sakata 1-chome, Oizumi-i	nachi, Ora-gun, Gunma, Japan	
		represen §100, in provision and all I	tatives, the entire right, title ar the invention, and in all appli nal, divisional, continuation, in	and Assignce's heirs, successors, assigns and interest for the United States of America assautions for patent including any and all provinternational, confirmation, substitute and reisues and reexamination certificates that may be	s defined in 35 U.S.C. sional, non- sue application(s),
(11)	Insert Identification.	(11)	SEMICONDUCTOR DEVIC	E	
	such as Title, Case Number or Foreign Application Number	Attorney			
				ecuted an application for patent in the United S	
(12)	Insert Date of Signing of	(12)			
	Application	on			
(13)	Alternative	(13)	U.S. Application Serial Number	r	
	Identification for filed applications	tiled			
applicate possible provision a grant of Patents of entire in agreement.	ions for the invention, and any pa as the Assignees may deem neces 2) Each undersigned agrees to ion or continuation or division the in obtaining evidence and going 3) Each undersigned agrees to ns of the International Convention 4) Each undersigned agrees to of a valid United States patent to 5) Each undersigned authorize of the United States resulting from terest, and covenants that he has ents in conflict herewith, and agree 6) Each undersigned hereby g	sary. be execute all ereof, or any forward with the execute all in for Protect to perform all the Assignee and requesing said application for the execute all in for the execute and requesing said applications that this grants the firm	papers necessary in connection patent or reissue application bath such interference. papers and documents and perfion of Industrial Property or sin affirmative acts which may be s. sts the Commissioner of the Unation or any divisional, continuation of OLIFF & BERRIDGE, PLC	with the application and any continuing, divisi- generate assignments in connection with such a with any interference which may be declared cooked thereon, and to cooperate with the Assigne orm any act which may be necessary in connectial argreements. The agreements are confirmed by reishing or reissue applications to the said Assignee assigned, and that he has not executed, and with an and his heirs, successors, assigns and legate he power to insert on this assignment any further attent and Trademark Office for recordation of	pplications and oncerning this es in every way tion with claims or ssue or reexamination y and all Letters s, as Assignees of the ll not execute, any i representatives. ler identification that
•	In witness whereof, executed		rsigned on the date(s) opposit	e the undersigned name(s).	
Date	March 13, 200	8	Inventor Signature	Akihiro Hasegawa	(SEAL)
Date			Inventor Signature		(SEAL)
Date			Inventor Signature		(SEAL)
Date					
Date			Inventor Signature		(SEAL)
then it sl	This assignment should preferal hould be signed before at least tw	bly be signed to witnesses	I before: (a) a Notary Public if who also sign here:	within the U.S.A. (b) a U.S. Consul if outside the	e U.S.A. If neither,
Date			Witness _		
Date			Witness		·

RECORDED: 03/19/2008

PATENT REEL: 020716 FRAME: 0060