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Address: OLIFF & BERRIDGE, PLC P.O. Box 19928 B. Enclosed (Check No. 186122) 8. Credit any overpayment or charge any underpayment deposit account number 15-046.				103	33776	6	Attorney Docket No.	130070
(1) Sachiko KAWAJI (2) Masayasu ISHIKO (3) Takahide SUGIYAMA (4) Masanori USUI (5) Juri SAITO (6) Koji HOTTA B. Additional name(s) of conveying party(ies) attached? □ Yes ☒ No 3. A. Nature of conveyance: □ Security Agreement □ Change of Name □ Other □ B. Execution Date: (1-4) October 17, 2006 (5-6) October 25, 2006 4. ☒ This document is being filed together with a new application. A. Patent Application: SEMICONDUCTOR DEVICES 5. Name and address of party to whom correspondence concerning document should be mailed: Name: James A. Oliff 61R6R1 00000033 11596053 (40, 0) 0 0 Address: OLIFF & BENRIDGE, PLC P. D. Box 19928 KABUSHIKI KAISHA TOYOTA CH KENKYUSHO 41-1, AZA YOKOMICHI, OAZA NAGAKUTE, NAGAKUTE-CHO AICHI-GUN, AICHI-KEN, 480-1192 JAPAN TOYOTA JIDOSHA K ABUSHIKI K, I, TOYOTA-CHO, TOYOTA-SHI AICHI-KEN, 471-8571 JAPAN B. Additional name(s) & address(es) attached? □ Ves ☒ No TOYOTA JIDOSHA K ABUSHIKI K, I, TOYOTA-CHO, TOYOTA-SHI AICHI-KEN, 471-8571 JAPAN B. Additional name(s) & address(es) attached? □ Ves ☒ No C. Title of Application: SEMICONDUCTOR DEVICES 6. Total number of applications and patents involved: □ Tot				Please record the at	tached origina	l docum	nent or copy thereof.	
(2) Masayasu ISHIKO (3) Takahide SUGIYAMA (4) Masanori USUI (5) Juri SAITO (6) Koji HOTTA B. Additional name(s) of conveying party(ies) attached? □ Yes ☒ No 3. A. Nature of conveyance: □ Assignment □ Merger □ Security Agreement □ Change of Name □ Other □ B. Execution Date: (1-4) October 17, 2006 (5-6) October 25, 2006 4. ☒ This document is being filed together with a new application. A. Patent Application: SEMICONDUCTOR DEVICES 5. Name and address of party to whom correspondence concerning document should be mailed: Name: James A. Oliff ATRAN1 00009093 11596063 (40,00 0) Address: OLIFE & BRARIDGE PLC P.O. Box 19928 8. Credit any overpayment or charge any underpaymen deposit account number 15-046.	1. A	. Name of cor	veying party(ies):	2	. A.	Name and address of receiving	g party(ies):
A. Patent Application No.(s)	3. A	2) Masayasu IS 3) Takahide SI 4) Masanori US 5) Juri SAITO 6) Koji HOTT . Additional no . Nature of con . Assignment . Security Agre . Other	SHIKO JGIYAMA SUI A ame(s) of con Y nveyance:	Merger Change of N		В.	KENKYUSHO 41-1, AZA YOKOMICH NAGAKUTE, NAGAKU AICHI-GUN, AICHI-KE JAPAN TOYOTA JIDOSHA KA 1, TOYOTA-CHO, TOY AICHI-KEN, 471-8571 J Additional name(s) & address	I, OAZA JTE-CHO N, 480-1192 BUSHIKI KAI OTA-SHI APAN (es) attached?
Additional numbers attached? Yes No C. Title of Application: SEMICONDUCTOR DEVICES 5. Name and address of party to whom correspondence concerning document should be mailed: Name: James A. Oliff ATRAN1 00000093 11596063 Address: OLIFF & BERRIDGE, LC P.O. Box 19928 Additional numbers attached? Yes No 6. Total number of applications and patents involved: 7. A. Total fee (37 CFR 3.41)\$ 40.00 B. Enclosed (Check No. 186122) 8. Credit any overpayment or charge any underpayment deposit account number 15-046.	i -				ew application		Date (N. C.)	
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Address: OLIFF & BERRIDGE, DLC P.O. Box 19928 8. Credit any overpayment or charge any underpayment deposit account number 15-046.	ATRANI	Name: <u>James A</u> 00000093 11	<u>, Oliff</u> 596063		7.	A.	Total fee (37 CFR 3.41)	.\$ <u>40.00</u>
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Alexandria, VA 22320	,]	P.O. Box 199	28	8.			iy underpayment t
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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 continuous the original document.	ľ	/ 1 1//1 //					Date: November 9, 2	

ASSIGNMENT FOR US PATENT APPLICATION

WHEREAS, the undersigned inventors, Jun SAITO of Toyota-shi, Aichi-ken, Japan and Koji HOTTA of Nishikamo-gun, Aichi-ken, Japan (hereinafter referred to as "the Assignors"), have invented certain new and useful improvements in "SEMICONDUCTOR DEVICES", for which an International patent application was filed on May 12, 2005 and was assigned serial number PCT/JP2005/008717; and

WHEREAS, TOYOTA JIDOSHA KABUSHIKI KAISHA, a corporation duly organized under and pursuant to the laws of Japan, and having a principal place of business at 1, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan, (hereinafter referred to as "the Assignee") is desirous of acquiring the entire right, title and interest of the Assignors in and to said improvements, the entire right, title and interest of the Assignors in and to any US patent application(s) based on said improvements, and in and to any Patent(s) of the United States, to be obtained therefor and thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, do hereby sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the entire right, title, and interest of the Assignors in and to the above-mentioned improvements, the entire right, title and interest of the Assignors in and to any US patent applications and any and all Patents of the United States of America that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant to and agree with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the improvements set forth in said above-mentioned application, and that the same right, title, and interest are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant to and agree with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said improvements or said applications for Patents, or any proceeding in connection with Patents for said improvements in the United States of America, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Patents, or any reissue or extension of any Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Patents for said improvements, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, their successors, legal representatives, and assigns;

PATENT REEL: 018600 FRAME: 0695 AND the Assignors hereby request the Commissioner of Patents and Trademarks to issue any and all said Patent(s) of the United States to the Assignee as the Assignee of said improvements, the Patent(s) to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date: 25/10/2006 Name of Assignor Jun Saito

Jun SAITO

Date: 25/10/2006 Name of Assignor Koji HOTTA

ASSIGNMENT FOR US PATENT APPLICATION

WHEREAS, the undersigned inventors, Sachiko KAWAJI of Owariasahi-shi, Aichi-ken, Japan, Masayasu ISHIKO of Nagoya-shi, Aichi-ken, Japan, Takahide SUGIYAMA of Aichi-gun, Aichi-ken, Japan and Masanori USUI of Seto-shi, Aichi-ken, Japan (hereinafter referred to as "the Assignors"), have invented certain new and useful improvements in "SEMICONDUCTOR DEVICES", for which an International patent application was filed on May 12, 2005 and was assigned serial number PCT/JP2005/008717; and

WHEREAS, KABUSHIKI KAISHA TOYOTA CHUO KENKYUSHO, a corporation duly organized under and pursuant to the laws of Japan, and having a principal place of business at 41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun, Aichi-ken, 480-1192 Japan, (hereinafter referred to as "the Assignee") is desirous of acquiring the entire right, title and interest of the Assignors in and to said improvements, the entire right, title and interest of the Assignors in and to any US patent application(s) based on said improvements, and in and to any Patent(s) of the United States, to be obtained therefor and thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, do hereby sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the entire right, title, and interest of the Assignors in and to the above-mentioned improvements, the entire right, title and interest of the Assignors in and to any US patent applications and any and all Patents of the United States of America that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant to and agree with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the improvements set forth in said above-mentioned application, and that the same right, title, and interest are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant to and agree with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said improvements or said applications for Patents, or any proceeding in connection with Patents for said improvements in the United States of America, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Patents, or any reissue or extension of any Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Patents for said improvements, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, their successors, legal representatives, and assigns;

PATENT REEL: 018600 FRAME: 0697 AND the Assignors hereby request the Commissioner of Patents and Trademarks to issue any and all said Patent(s) of the United States to the Assignee as the Assignee of said improvements, the Patent(s) to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date: October 17, 2006	Name of Assignor_	Sachiko Kawaji Sachiko KAWAJI
Date: <i>October 1</i> 7, 2006	Name of Assignor	Masayasu Dalukg Masayasu ISHIKO
Date: October 17, 2006		Jahahide Sugiyama Takahide SUGIYAMA
Date: October 17, 2006	Name of Assignor	Masanori USUI