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		Attorney Docket No. <u>130070</u>
Please record the attached original document or copy thereof.		
Total number of pages including cover sheet, attachments, and document: <u>8</u>		
1. A. Name of conveying parties: [1] Sachiko KAWAJI [2] Masayasu ISHIKO [3] Takahide SUGIYAMA [4] Masanori USUI [5] Jun SAITO [6] Koji HOTTA  B. Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. A. Name and address of receiving party: KABUSHIKI KAISHA TOYOTA CHUO KENKYUSHO 41-1, AZA YOKOMICHI, OAZA NAGAKUTE, NAGAKUTE-CHO AICHI-GUN, AICHI-KEN, 480-1192 JAPAN  TOYOTA JIDOSHA KABUSHIKI KAISHA 1, TOYOTA-CHO, TOYOTA-SHI AICHI-KEN, 471-8571 JAPAN  B. Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. A. Nature of conveyance:  <input type="checkbox"/> Assignment <input type="checkbox"/> Merger  <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name  <input checked="" type="checkbox"/> Other <u>Record to correct Assignee name on an assignment document previously recorded on November 9, 2006, reel 018600/frame 0694</u>  B. Execution Date: <u>[1]-[4] October 17, 2006; [5] &amp; [6] October 25, 2006.</u>		
4. A. Patent Application No. <u>11/596,063</u>		B. Patent No.(s)
Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
C. Title of Application: <u>SEMICONDUCTOR DEVICE</u>		
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: <u>James A. Oliff</u>  Address: <u>OLIFF &amp; BERRIDGE, PLC</u> <u>P.O. Box 320850</u> <u>Alexandria, VA 22320-4850</u> <u>Phone Number: 703-836-6400</u> <u>Fax Number: 703-836-2787</u>	6. Total number of applications and patents involved: <u>1</u>  7. Please charge Deposit Account No. 15-0461 the total fee (37 CFR 3.41) in the amount of \$40.00.  8. Credit any overpayment or charge any underpayment to deposit account number 15-0461.	
9. <b>Statement and signature.</b> <i>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.</i>  <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;">             _____            James A. Oliff, Registration No. 27,075            John A. Radi Registration No. 59,345         </div> <div style="width: 35%; text-align: right;">           Date: <u>October 26, 2007</u> </div> </div>		


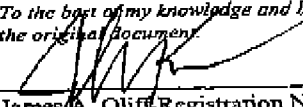
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<b>Mail Stop:</b> Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450		<b>RECORDATION FORM COVER SHEET</b> <small>PATENTS ONLY</small> <b>11-17-2006</b>  <b>103337766</b>		<b>U.S. DEPARTMENT OF COMMERCE</b> Patent and Trademark Office Attorney Docket No. <b>130070</b>	
Please record the attached original document or copy thereof.					
<b>1. A. Name of conveying party(ies):</b> (1) Sachiko KAWAJI (2) Masayasu ISHIKO (3) Takahide SUGIYAMA (4) Masanori USUI (5) Juri SAITO (6) Koji HOTTA  <b>B. Additional name(s) of conveying party(ies) attached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			<b>2. A. Name and address of receiving party(ies):</b> KABUSHIKI KAISHA TOYOTA CHUO KENKYUSHO 41-1, AZA YOKOMICHI, OAZA NAGAKUTE, NAGAKUTE-CHO AICHI-GUN, AICHI-KEN, 480-1192 JAPAN  TOYOTA JIDOSHA KABUSHIKI KAISHA 1, TOYOTA-CHO, TOYOTA-SHI AICHI-KEN, 471-8571 JAPAN  <b>B. Additional name(s) &amp; address(es) attached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>3. A. Nature of conveyance:</b> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____  <b>B. Execution Date:</b> (1-4) October 17, 2006 (5-6) October 25, 2006					
<b>4. <input checked="" type="checkbox"/> This document is being filed together with a new application.</b> <b>A. Patent Application No.(s)</b> _____ <b>B. Patent No.(s)</b> _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>C. Title of Application:</b> SEMICONDUCTOR DEVICES					
<b>5. Name and address of party to whom correspondence concerning document should be mailed:</b> Name: James A. Oliff ATRRN1 00000093 11596063 Address: OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, VA 22320 (40.00 DP)			<b>6. Total number of applications and patents involved:</b> 1 <b>7. A. Total fee (37 CFR 3.41).....\$ 40.00</b> <b>B. Enclosed (Check No. 186122)</b> <b>8. Credit any overpayment or charge any underpayment to deposit account number 15-046 .</b>		
<b>9. Statement and signature.</b> <i>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.</i>  James A. Oliff Registration No. 27,075 John S. Kern Registration No. 42,719 Date: November 9, 2006 Total number of pages including cover sheet, attachments, and document: 5					

11/16/2006 ATRRN1 00000093 11596063 04 FC:8023

(4)

## 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;

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 Kawai  
Sachiko KAWAI

Date: October 17, 2006 Name of Assignor Masayasu Ishiko  
Masayasu ISHIKO

Date: October 17, 2006 Name of Assignor Takahide Sugiyama  
Takahide SUGIYAMA

Date: October 17, 2006 Name of Assignor Masanori Usui  
Masanori USUI

## 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;

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  
Koji HOTTA