504072523 10/28/2016 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		N	NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		A	ASSIGNMENT				
CONVEYING PARTY	/ DATA	•					
		Na	ame		Execution Date		
Hyoungjun NA					09/22/2016		
Ken TOSHIYUKI					09/22/2016		
Shouji ABOU					09/22/2016		
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PROPERTY NUMBE	RS Total: 1	1					
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DATE SIGNED:		1	10/28/2016				
Total Attachments: 2		I					
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ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

X							
Legal Name(s)	(3)	Shouji ABOU	(4)				
of inventor(s)	(5)		(6)				
	(7)		(8)				
Incort Name of	In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to						
Assignee	(9)	TOYOTA JIDOSHA KABUSHIKI KAISHA					
Insert Address of Assignee	(10)	I, Toyota-cho, Toyota-shi, Aichi-ken, 471-8571 Japan					
	the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as						
Insert Identification such as Title, Case Number, or Facaine	(11)	(11) SWITCHING CIRCUIT					
Application Number	(Attor	ney Docket No.), f	iled on even date herewith or as			
Alternative	(12)	U.S. Application Number					
Identification for filed applications	filed						
	Insert Name of Assignce Insert Address of Assignce Insert Identification such as Title, Case Number, or Foreign Application Number Alternative Identification for	(7) In conthe unassign, Insert Name of (9) Insert Address of (10) Assignee (10) Assignee (10) (herein the entitiventities of the entities of the entitie	(7) In consideration of the sum of one dolla Insert Name of Assignee Insert Address of (10) TOYOTA JIDOSHA KABUSI Insert Address of (10) TOYOTA JIDOSHA KABUSI (10) Insert Identification such as Title, Case Number, or Foreign Application Number (12) U.S. Application Number	(7) (8) In consideration of the sum of one dollar (\$1.00) and other the undersigned, the receipt and sufficiency of which are hassigned, the receipt and sufficiency of which are hassigned the receipt and sufficiency of which are hassigned the undersigned, the receipt and sufficiency of which are hassigned the undersigned, the receipt and sufficiency of which are hassigned the undersigned, the receipt and sufficiency of which are hassigned the undersigned, the receipt and sufficiency of which are hassigned the undersigned, the receipt and sufficiency of which are hassigned the undersigned, the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of which are hassigned to undersigned the receipt and sufficiency of the United States of Assigned the entire right, title and interest for the United States of A invention, and in all applications for patent including any continuation, international, substitute and reissue application and reexamination certificates that may be granted on the invention as Title, Case Insert Identification sumber (11) SWITCHING CIRCUIT Alternative (12) U.S. Application Number			

 Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.

2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.

3) Each undersigned agrees 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 or similar agreements.

4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignce.

5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.

6) Each undersigned hereby grants the firm of OLIFF PLC the power to insert on this assignment any further identification that 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.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR \$1.56.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned usua(s).

Date <u>September 22, 2016</u> Inventor Signature <u>Idyoursayun</u> Ma (SEAL) Inventor Signature <u>An Souhryn</u>hu Inventor Signature <u>Shoriji Abou</u> Date Sapresabor 22, 2016 (SEAL) September 22, 2016 (SEAL) Date

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here:

Witness

September 22,20/6. Dste

Witness

Jaro Shinosaka Masafumi Momore