PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUTAKA FUKUI	02/09/2017
YASUHIRO KAGAWA	02/06/2017
KENSUKE TAGUCHI	02/06/2017
NOBUO FUJIWARA	01/25/2017
KATSUTOSHI SUGAWARA	01/25/2017
RINA TANAKA	01/27/2017

RECEIVING PARTY DATA

Name:	MITSUBISHI ELECTRIC CORPORATION	
Street Address:	7-3, Marunouchi 2-chome, Chiyoda-ku	
City:	Tokyo	
State/Country:	Japan	
Postal Code:	100-8310	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15509986

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SIGNATURE:	/Natalie S. Burkhardt/
DATE SIGNED:	03/09/2017

Total Attachments: 3

PATENT REEL: 041527 FRAME: 0045

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> PATENT REEL: 041527 FRAME: 0046

出願データシート (37 CFR 1.76) 及び単独の譲受人への譲渡証を用いる実用特許出願又は意匠特許出願 に関する宣言書 (37 CFR 1.63)

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

発明の名称 Title of SEMICONDUCTOR DEVICE Invention	
以下に記名された発明者として、私はここに以下の通り宣言 As the below named inventor, I hereby declare that:	します:
本宣言は以下に関するものです: This declaration is directed to:	
□ 添付の出願、又は The attached application, or	
米国出願番号又は PCT 国際出願番号 United States application or PCT international application	n number PCT/JP2015/075551
出願日 September 9, 2015 filed on	
上記の出願は、私により、又は私の承認の下になされたもの The above-identified application was made or authorized to be	
私は、私が当該出願のクレーム発明に関する真の発明者又は I believe that I am the original inventor or an original joint inve	
(以下、譲受人と呼ぶ) は、	
事業所を有し、当該発明、及び米国、米国の領有地、及び全関する全ての権利、権原、及び利益の取得を希望します。 WHEREAS, Mitsubishi Electric Corporation (hereinafter referred to as "ASSIGNEE") having places of b Tokyo 1008310, Japan, is desirous of acquiring the entire righ to any Letters Patent that may be granted therefor in the United	usiness at: 7-3, Marunouchi 2-chome, Chiyoda-ku, t, title and interest in and to said invention and in and
foreign countries;	
トーナ 合計にじょの対体の単語なってに強烈し ストナス	その他の適当かつ価値ある対価の下、私はここに、 記全かつ排他的な権利(当該出願から生じる、国際 優先権を含む)、及び米国、米国の領有地、及び全 核特許の全ての分割、再発行、継続、差替及び更新 、譲渡、及び移転します。

and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations,

substitutions and renewals thereof.

PATENT REEL: 041527 FRAME: 0047 私は、米国、米国の領有地、及び全ての外国における特許庁の職員に対し、当該特許が付与された際に、全ての当該特許を、私の全ての権利、権原、及び利益の譲受人として、当該譲受人、その相続人、及びその譲受人の使用及び利益の目的のみにおいて、当該特許が付与され得る全ての期間において、当該譲渡及び売却がもし無ければ私が有するであろうものと同程度に完全かつ全てに渡り、当該譲受人に対して発行することをここに許可し、かつ要求します。

I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, 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 held by me had this Assignment and sale not been made.

さらに、私は、当該譲受人又はその代理人に、当該発明につき私が知っているいかなる事実をも伝え、いかなる法的手続きにおいても証言し、全ての合法な書面に署名し、全ての分割出願、継続出願、差替出願、更新出願、及び再発行出願を行い、全ての当該特許が当該譲受人に対して発行されるように全ての必要な譲渡書面を作成し、全ての合法な宣誓書を作成し、及び、当該譲受人、その相続人、及びその譲受人を助け、米国、米国の領有地、及び全ての外国において当該発明の適切な保護を図るために一般的に可能なこと全てを行うことに同意します。

Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

私は、本宣言書におけるいかなる故意による虚偽の陳述も、18 U.S.C. 1001 に基づき罰金、又は 5 年以下の懲役、又はそれらの双方により処罰され得ることをここに認めます。

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.

STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 C.F.R. § 1.69(b):

The DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS is an accurate translation of the corresponding English language DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS.

Signature: The state of the sta	Date: 6/10/2013
発明者の法律上の氏名 LEGAL NAME OF INVENTOR 発明者	пи
Inventor: Yutaka FUKUI	日付 Date: Felinary 9.20/7
署名 Signature: Yutaka Fukui	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

PATENT REEL: 041527 FRAME: 0048 出願データシートによる宣誓書

および譲渡用の補足用紙

SUPPLEMENTAL SHEET FOR DECLARATION USING AN APPLICATION DATA SHEET AND ASSIGNMENT

追加発明者

ADDITIONAL INVENTOR(S)

補足用紙

Supplemental Sheet

ページ Page 1 of 1

発明者の法律上の氏名 LEGAL NAME OF INVENTOR 発明者 Inventor: Yasuhiro KAGAWA 署名	目付 Date: February 6,2017
Signature: Yasuhiro Kagawa 発明者の法律上の氏名 LEGAL NAME OF INVENTOR 発明者 Inventor: Kensuke TAGUCHI	日付 February 6, 2017
署名 Signature: Kensuke Taguchi	
発明者の法律上の氏名 LEGAL NAME OF INVENTOR 発明者 Inventor: Nobuo FUJIWARA 署名 Signature: Nobuo Tujiwara	目付 January 25, 2017
発明者の法律上の氏名 LEGAL NAME OF INVENTOR 発明者 Inventor: Katsutoshi SUGAWARA 署名 Signature: Katsutoshi Sugawawa	目付 January 25, 2017
発明者の法律上の氏名 LEGAL NAME OF INVENTOR 発明者 Inventor: Rina TANAKA 署名 Signature: 【	目付 Date: <u>January 27, 2017</u>

PATENT REEL: 041527 FRAME: 0049

RECORDED: 03/09/2017