504344903 05/01/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4391591

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
VINOTH SUNDARAMOORTHY			04/25/2017	
ENEA BIANDA			04/25/2017	
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ULIAN NISTOR			03/03/2017	
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Name:	ABB SC	CHWEIZ AG		
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Postal Code: PROPERTY NUMBERS	5400 5 Total: 1			
		Number		
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Total Attachments: 7

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COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY AND DESIGN PATENT APPLICATIONS

DECLARATION

As a below named inventor, I hereby declare that:

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I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD AND APPARATUS FOR DETERMINING AN ACTUAL JUNCTION TEMPERATURE OF AN IGBT DEVICE

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this declaration is punishable under section 1001 of title 18 by fine or imprisonment of not more than 5 years, or both.

ASSIGNMENT

WHEREAS, Vinoth Sundaramoorthy of Alberich Zwyssigstrasse 53, 5430 Wettingen, Switzerland; Enea Bianda of Mellingerstrasse 128B, 5400 Baden, Switzerland; Richard Bloch of Muehlemossweg 6A, 6414 Oberarth, Switzerland; Iulian Nistor of Mammutweg 3, 8166 Niederweningen, Swizterland; and Gerold Knapp of Kreuzstrasse 16, 5420 Ehrendingen, Switzerland, hereinafter referred to as Assignors, have made one or more new and useful inventions in **METHOD AND APPARATUS FOR DETERMINING AN ACTUAL JUNCTION TEMPERATURE OF AN IGBT DEVICE** for which Assignors have made or will make an application for Letters Patent of the United States (hereinafter the "Application"); and

WHEREAS, ABB Schweiz AG, hereinafter referred to as Assignee, a corporation of Switzerland, having principal place of business at Brown Boveri Strasse 6, 5400 Baden, Switzerland, desires to acquire all of the entire right, title and interest in, to and under the one or more inventions disclosed, described and claimed or intended so to be in the Application, and in, to and under the Application, and in, to and under any and all

COMBINED ASSIGNMENT AND DECLARATION ABBI-1300/CH-13129-US-PCT Page 1 of 7 15728225.1 Letters Patent, United States and foreign, which may be obtained therefore and thereon;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient considerations to Assignors in hand paid, the receipt of which is hereby acknowledged, Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer unto Assignee, all of the entire right, title, and interest in, to and under the one or more inventions disclosed, described and claimed or intended so to be in the Application, and any and all other applications thereon and arising therefrom, including any and all applications claiming the benefit thereof, and any and all divisions, continuations, and continuations-in-part thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignors acknowledge that the Application was executed concurrently herewith. Assignors hereby authorize Assignee, its counsel, or its agents to fill-in some or all of the following list of information items (a) through (b) at the discretion of the Assignee, its counsel, or its agents:

(a)	Patent Office Number of the Application:	15/078,588

(b) Filing Date of the Application: 03/23/2016

Assignors hereby authorize and request the Honorable Assistant Secretary and Commissioner for Patents and Trademarks to issue said Letters Patent to Assignee, its assigns and legal representatives.

Assignors agree to assign and execute any and all other papers necessary or desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

COMBINED ASSIGNMENT AND DECLARATION ABBI-1300/CH-13129-US-PCT Page 2 of 7 15728225.1

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and a second

25.04.2017 WITNESS Assignor's hand this _____ day of _____,

R Winder June . Vinoth Sundaramoorthy

Witness	Name:	Ener	Bianda
Witness	Signature:		1

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ABB Schweiz AG

······· 1000 By:

Printed Name: Oliver Folini

Date: 25.04.2017

COMBINED ASSIGNMENT AND DECLARATION ABBI-1300/CH-13129-US-PCT Page 3 of 7 15728225.1

25.04.2017

WITNESS Assignor's hand this _____ day of _____

Enea Blanda

Witness Name: Vindt Sundaramoerthy Witness Signature: J. Vin M. M.

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Sec.

ABB Schweiz AG

By:

Printed Name: Oliver Folini

Date: 25.04.2017

COMBINED ASSIGNMENT AND DECLARATION ABBI-1300/CH-13129-US-PCT Page 4 of 7 15728225.1

WITNESS Assignor's hand this 24 day of march, 2018.

R. Bloch -----

Richard Bloch

Witness Name: <u>André Blac</u> Witness Signature:

1

ABB Schweiz AG

and Containing By

Oliver Folini Printed Name:

25,04.2017 Date:_

COMBINED ASSIGNMENT AND DECLARATION ABBI-1300/CH-13129-US-PCT Page 5 of 7 15728225.1

WITNESS Assignor's hand this 3 day of Nanh 2017
Iulian Nistor
Witness Name: PARAG UPADHYAY
Witness Signature:

ABB Schweiz AG

Contraction of the second	terment .
Ву:	t 2
Printed Name:_	Oliver Folini
i milou munio	25.04.2017
Date:	2010 I.I.O.I.

COMBINED ASSIGNMENT AND DECLARATION ABBI-1300/CH-13129-US-PCT Page 6 of 7 15728225.1

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WITNESS Assignor's hand this _____ day of _____,

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	Gerold Kna	ipp //	~~
Witness Name: Witness Signature:	ABB Schwelz AG Traction Converters Leiter Entwicklung Christian Huber		

ABB Schweiz AG

and f $\gamma \sim \infty$ By: < OliverFolini Printed Name:____

Date:	25.04.2017

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RECORDED: 05/01/2017