

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7776254

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
OLLI ALKKIOMÄKI	04/28/2022
JONI SIIMESJÄRVI	04/27/2022
VILLE SÄRKIMÄKI	04/27/2022
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<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17772553
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<b>ATTORNEY DOCKET NUMBER:</b>	P17874US01 (42005-2342)
<b>NAME OF SUBMITTER:</b>	SEAN JOHNSON VARLEY
<b>SIGNATURE:</b>	/Sean Johnson Varley/
<b>DATE SIGNED:</b>	02/02/2023
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 5</b>	
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**COMBINED DECLARATION AND GLOBAL ASSIGNMENT  
FOR UTILITY OR DESIGN PATENT APPLICATION**

As the below named inventor(s), I/we hereby declare that:

This declaration and assignment are directed to:

**PREDICTION OF FAULTY BEHAVIOUR OF A CONVERTER BASED ON TEMPERATURE  
ESTIMATION WITH MACHINE LEARNING ALGORITHM**

- ☒ the specification of which is attached hereto, or  
☐ United States application number or PCT international application number  
\_\_\_\_\_ filed on \_\_\_\_\_.

(I/We hereby authorize and request the Company or its delegated attorneys or agents to insert the application number and filing date of the application when known.)

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

I/We believe that I/we am/are the original joint inventor(s) of a claimed invention in the application.

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

I/We have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

I/We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR § 1.56, including, for continuation-in-part applications, material information which became available between the filing date of the prior application and the filing date of the continuation-in-part application.

In accordance with my/our obligation(s) under an agreement between the Company and me or (as applicable) arising out of other agreements, and/or for other good and valuable consideration of which we acknowledge receipt, I/we,

Inventor First Name	Inventor Middle Name	Inventor Last Name	City/Town	State	Country
Olli		Alkkiomäki	Helsinki		Finland
Joni		Siimesjärvi	Helsinki		Finland
Ville		Särkimäki	Helsinki		Finland

hereby sell and assign to:

Name of Company: ABB Schweiz AG
Entity Type (optional):

Address: Bruggerstrasse 66, Baden, Switzerland, 5400

herein referred to as "Company", its successors and assigns our entire respective rights, title and interest in and to the invention and improvements made or conceived by me/us described in the application(s) listed above and in the following table:

Country of Filing	Type of Filing	Application Number	Filing Date	Title
EP	PCT	2020/079129	2020-10-15	PREDICTION OF FAULTY BEHAVIOUR OF A CONVERTER BASED ON TEMPERATURE ESTIMATION WITH MACHINE LEARNING ALGORITHM
EP	National Application	19207584.4	2019-11-07	PREDICTION OF FAULTY BEHAVIOUR OF A CONVERTER BASED ON TEMPERATURE ESTIMATION WITH MACHINE LEARNING ALGORITHM

(I/We hereby authorize and request the Company or its delegated attorneys or agents to insert above the application number and filing date of the application(s) when known.)


and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, continuations-in-part, reexaminations, renewals, and reissues thereof, and all rights of priority resulting from the filing of the application(s), and authorize and request any official whose duty it is to issue patents, to issue any patent on the inventions and improvements resulting therefrom to the Company, or its successors or assigns, and agree that on request and without further consideration, I/we will communicate to the Company or its representatives or nominees any facts known to us respecting the inventions and improvements and testify in any legal proceeding, make all rightful oaths, sign all lawful papers and execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including, but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter parties review, or extension thereof, and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.

INVENTOR 1

Signature: *Olli Alkkiomäki*  
Olli Alkkiomäki (Apr 28, 2022 08:43 GMT+3)  
**Olli Alkkiomäki**

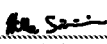
Date: 28-Apr-2022

INVENTOR 2

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Joni Siimesjärvi (Apr 27, 2022 16:45 GMT+3)  
**Joni Siimesjärvi**

Date: 27-Apr-2022

INVENTOR 3

Signature:   
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Ville Särkimäki

Date: 27-Apr-2022