# Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2635284

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
OLAF STALLMANN	11/19/2013
GERHARD HEINZ	11/13/2013
PETER ULRICH KOSS	11/27/2013

# **RECEIVING PARTY DATA**

Name:	ALSTOM Technology Ltd	
Street Address:	Brown Boveri Strasse 7	
City:	Baden	
State/Country:	SWITZERLAND	
Postal Code:	CH-5400	

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14055170

#### **CORRESPONDENCE DATA**

Fax Number:

Email: patents-and-trademarks@alstom.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: ALSTOM TECHNOLOGY LTD
Address Line 1: BROWN BOVERI STRASSE 7/664/2
Address Line 2: CHTI INTELLECTUAL PROPERTY
Address Line 4: BADEN, SWITZERLAND CH-5401

ATTORNEY DOCKET NUMBER:	W12/041-0
NAME OF SUBMITTER:	ROBERT D. CRAWFORD
Signature:	/Robert D. Crawford/
Date:	12/03/2013 <b>PATENT</b>

502589126 REEL: 031708 FRAME: 0331

14055170

00 075 T This document serves as an Oath/Declaration (37 CFR 1.63).

#### Total Attachments: 6

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PATENT REEL: 031708 FRAME: 0332

# ASSIGNMENT & DECLARATION (37 CFR §1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR §1.76)

WHEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in <u>DESULFURIZATION IN A REGENERATIVE CALCIUM CYCLE SYSTEM</u> for which an application for Letters Patent was filed in the U.S. Patent and Trademark Office on <u>16.10.2013</u> and has been assigned Application No. <u>14/055,170</u>

AND WHEREAS, **ALSTOM Technology Ltd**, a joint stock company of Switzerland, having an office at **Brown Boveri Strasse 7**, 5400 **Baden**, **Switzerland** (hereinafter referenced as ASSIGNEE) is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefore in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue tome with respect to the filling of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;

AND I further agree to execute all necessary or desirable lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

AND I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filling subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

AND I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

AND I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

FURTHER, as a below named inventor, I hereby declare that:

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

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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.

STALLMANN, Olaf

Büttenweg 21, 55270 Essenheim

Germany

HEINZ, Gerhard

Anne-Frank-Weg 26, 73732 Esslingen

Germany

KOSS, Peter Ulrich

Rotfluhstrasse 24, 8701 Baden, Switzerland

Switzerland

Date

Date

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WHEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in <a href="DESULFURIZATION IN AREGENERATIVE CALCIUM CYCLE SYSTEM">DESULFURIZATION IN AREGENERATIVE CALCIUM CYCLE SYSTEM</a> for which an application for Letters Patent was filed in the U.S. Patent and Trademark Office on <a href="16.10.2013">16.10.2013</a> and has been assigned Application No. <a href="14/055,170">14/055,170</a>

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NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue tome with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;

AND I further agree to execute all necessary or desirable lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

AND I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filling subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

AND I further agree that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

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FURTHER, as a below named inventor, I hereby declare that:

Switzerland

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

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STALLMANN, Olaf	Date
Büttenweg 21, 55270 Essenheim Germany	
Lea fleig	15.11. 2013
HEINZ, Gerhard	Date
Anne-Frank-Weg 26, 73732 Esslingen	
/ Germany	
KOSS, Peter Ulrich	Date
Rotfluhstrasse 24, 8701 Baden, Switzerland	اسم بشو و خو

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NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto the said ASSIGNEE, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue tome with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Patent to said ASSIGNEE, as the assignee of the whole right, title and interest thereto;

AND I further agree to execute all necessary or desirable lawful future documents, including assignments in favor of ASSIGNEE or its designee, as ASSIGNEE or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

AND I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEE thereof shall hereafter require and prepare at its own expense;

M

PATENT

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AND I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

FURTHER, as a below named inventor, I hereby declare that:

Rotfluhstrasse 24, 8701 Baden, Switzerland

Switzerland

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

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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.

STALLMANN, Olaf Büttenweg 21, 55270 Essenheim Germany	Date
HEINZ, Gerhard Anne-Frank-Weg 26, 73732 Esslingen Germany	Date
Mh h	27.11. 2019
KOSS, Peter Ulrich	Date