

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3251985

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
THOMAS ETTER	01/09/2015
ROLAND MÜCKE	02/16/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ALSTOM TECHNOLOGY LTD
<b>Street Address:</b>	BROWN BOVERI STRASSE 7
<b>City:</b>	BADEN
<b>State/Country:</b>	SWITZERLAND
<b>Postal Code:</b>	5400
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14493885
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Email:</b>	patents-and-trademarks@alstom.com
<b>Correspondent Name:</b>	ALSTOM TECHNOLOGY LTD
<b>Address Line 1:</b>	BROWN BOVERI STRASSE 7
<b>Address Line 2:</b>	CHTI INTELLECTUAL PROPERTY
<b>Address Line 4:</b>	BADEN, SWITZERLAND 5400
<b>ATTORNEY DOCKET NUMBER:</b>	B11/228-0
<b>NAME OF SUBMITTER:</b>	ROBERT D. CRAWFORD
<b>SIGNATURE:</b>	/Robert D. Crawford/
<b>DATE SIGNED:</b>	03/05/2015
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 4</b>	
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**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 METHOD FOR MANUFACTURING COMPONENTS MADE OF SINGLE CRYSTAL (SX) OR DIRECTIONALLY SOLIDIFIED (DS) NICKELBASE SUPERALLOYS for which an application for Letters Patent was filed in the U.S. Patent and Trademark Office on September 23, 2014 and has been assigned Application No. 14/493,885;

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 to me 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;

Docket Number: B11/228-0

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;

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.

  
\_\_\_\_\_  
Thomas ETTER  
Kornweg 18  
5037 Muhen  
Switzerland

03/01/15  
Date

\_\_\_\_\_  
Roland MÜCKE  
Dammstrasse 6  
5210 Windisch  
Switzerland

\_\_\_\_\_  
Date

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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;

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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;

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Thomas ETTER  
Kornweg 18  
5037 Muhen  
Switzerland

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Roland MÜCKE  
Dammstrasse 6  
5210 Windisch  
Switzerland

16/02/2015  
Date