501836235 02/29/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| Roland Richard Moser | 01/31/2012 |
| Josef Erni | 01/29/2012 |

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: | 13353510 | |

CORRESPONDENCE DATA

Fax Number: (703)717-9392 Phone: 703-717-9351

Email: CGOODE@CermakNakajima.COM

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via

US Mail.

Correspondent Name: ADAM J. CERMAK

Address Line 1: 127 S. Peyton Street, Suite 210
Address Line 4: ALEXANDRIA, VIRGINIA 22314

| ATTORNEY DOCKET NUMBER: | 003-465 |
|-------------------------|---------|
|-------------------------|---------|

NAME OF SUBMITTER: Christopher Goode

Total Attachments: 4

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PATENT REEL: 027781 FRAME: 0197 OP \$40.00 13353510

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by MOSER Roland Richard, and ERNI Josef, residing at Hardturmstrasse 102, 8005 Zurich, Switzerland and Mattenbachstrasse 11, CH-8400 Winterthur, Switzerland (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in "ROLLING ELEMENT FOR THE POLYDIRECTIONAL TRAVEL OF A VEHICLE, AND VEHICLE HAVING SUCH A ROLLING ELEMENT" set forth in an application for Letters Patent of the United States,

| (1) | Which is a provisional application (a) ☐ to be filed herewith; or (b) ☐ bearing Application No, and filed on; or |
|-----|--|
| (2) | which is a non-provisional application |
| | (a) having an oath or declaration executed on even date herewith prior to filing of the application; |
| | (b) bearing Application No. <u>13/353,510</u> , and filed on <u>01/19/2012</u> ; or |
| | (c) to be filed; and |

WHEREAS, ALSTOM Technology Ltd, a corporation duly organized under and pursuant to the laws of Switzerland and having a principal place of business at Brown Boveri Strasse 7, CH-5400 Baden, Switzerland (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the

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Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns; but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys and patent agents of Cermak Kenealy Vaidya & Nakajima LLP, of Alexandria, Virginia, to insert in the spaces provided above the filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to Issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

| DATE 31. 1.2012 | SIGNATURE OF ASSIGNOR | Ben no |
|-----------------|------------------------|----------------------|
| DATE | SIGNATURE OF ASSIGNOR | MOSER ROYAND RICHARD |
| DATE | SIGNATURE OF ASSIGNOR_ | ERNI Josef |
| DATE | SIGNATURE OF ASSIGNOR | |
| DATE | SIGNATURE OF ASSIGNOR | |
| DATE | SIGNATURE OF ASSIGNOR | |

Att'y Ref. No.: 003-465

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by <u>MOSER Roland Richard</u>, and <u>ERNI Josef</u>, residing at <u>Hardturmstrasse 102</u>, <u>8005 Zurich</u>, <u>Switzerland</u> and <u>Mattenbachstrasse 11</u>, <u>CH-8400 Winterthur</u>, <u>Switzerland</u> (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in "ROLLING ELEMENT FOR THE POLYDIRECTIONAL TRAVEL OF A VEHICLE, AND VEHICLE HAVING SUCH A ROLLING ELEMENT" set forth in an application for Letters Patent of the United States,

| (1) | which is a provisional application (a) ☐ to be filed herewith; or (b) ☐ bearing Application No, and filed on; or |
|-----|--|
| (2) | ☐ which is a non-provisional application |
| | (a) having an oath or declaration executed on even date herewith prior to |
| | filing of the application; |
| | (b) ⊠ bearing Application No. <u>13/353,510</u> , and filed on <u>01/19/2012</u> ; or |
| | (c) |

WHEREAS, <u>ALSTOM Technology Ltd</u>, a corporation duly organized under and pursuant to the laws of <u>Switzerland</u> and having a principal place of business at <u>Brown Boyeri Strasse 7, CH-5400 Baden, Switzerland</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the

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Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys and patent agents of Cermak Kenealy Valdya & Nakajima LLP, of Alexandria, Virginia, to insert in the spaces provided above the filing date, application number, and attorney's docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

| DATE | SIGNATURE OF ASSIGNOR_ | MOSER ROLAND RICHARE |
|----------------|------------------------|-----------------------|
| DATE_29.1.2012 | SIGNATURE OF ASSIGNOR_ | Enifosef ERNIJOSEF |
| DATE | SIGNATURE OF ASSIGNOR_ | |