

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3808610

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JOSEPH LANGLAIS	04/11/2014
PETER DONALD WAITE	04/11/2014
FRANCIS BRETON	04/11/2014
SERGE MUNGER	04/11/2014
BEAULIEU MARTIN	04/15/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	RIO TINTO ALCAN INTERNATIONAL LIMITED
<b>Street Address:</b>	1188 SHERBROOKE WEST
<b>City:</b>	MONTREAL QC
<b>State/Country:</b>	CANADA
<b>Postal Code:</b>	H3A 3G2
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15024894
<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>	lcochran@bannerwitcoff.com
<b>Correspondent Name:</b>	BANNER & WITCOFF LTD
<b>Address Line 1:</b>	1100 13TH ST NW
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<b>ATTORNEY DOCKET NUMBER:</b>	007804.00011
<b>NAME OF SUBMITTER:</b>	GREGORY G. SCHLENZ
<b>SIGNATURE:</b>	/Gregory G. Schlenz, Reg. No. 55,597/
<b>DATE SIGNED:</b>	03/31/2016
<b>Total Attachments: 4</b>	
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Our Reference: 05001032-368USPR

## UNIVERSAL ASSIGNMENT OF INVENTION

WHEREAS,

Name: LANGLAIS, Joseph  
Address: 2140 Pasteur, Saguenay QC G7X 4G5, Canada

Name: WAITE, Peter Donald  
Address: 58 rue De Crespieul, Saguenay QC G7H 7M3, Canada

Name: BRETON, Francis  
Address: 1764 des Cent-Associés, Saguenay QC G7H 7C3, Canada

Name: MUNGER, Serge  
Address: 6389 Portage des Roches-Nord, Saguenay QC G7N 1Z9, Canada

Name: BEAULIEU, Martin  
Address: 3995 rue Bannantyne, app. 315, Verdun H4G 1C2, Canada

(hereinafter referred to as the "Assignor"), has invented one or more invention(s) relating to and entitled

### DUAL-FUNCTION IMPELLER FOR ROTARY INJECTOR

set forth and described in United States Patent Application No. 61/883,728

(herein after referred to as the "Invention");

AND WHEREAS,

Name : RIO TINTO ALCAN INTERNATIONAL LIMITED  
Address : 1188 Sherbrooke West, Montréal QC H3A 3G2, Canada

(hereinafter referred to as the "Assignee")

desires to have the entire right, title, interest, property and benefit in and for Canada, the United States, and all other countries and jurisdictions in the world, in and to the Invention;

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, the Assignor agrees to and does hereby:

confirm to have sold, assigned, transferred, and set over to the Assignee, at least as early as 10/10/13 (dd/mm/yy), and, to any extent to have not already sold, assigned, transferred or set over to Assignee, does hereby sell, assign, transfer and set over to the Assignee, and to the Assignee's successors, assigns, nominees or other legal representatives, its entire right, title, interest, property and benefit including any right to sue for past infringements in and for Canada, the United States, and all other countries and jurisdictions in the world, in and to the Invention, any and all applications filed therefore, including any and all corresponding applications whether in the form of divisions, continuations, re-examinations, re-issues and extensions thereof, any and all patents that may issue, be granted or result therefrom for the Invention, and any and all rights of priority resulting from the filing of any of the above-identified applications and any previously filed applications in respect of the Invention under international conventions, treaties or otherwise, the same to be held and enjoyed fully and exclusively;

do all lawful acts and to execute and deliver, without further consideration other than expenses reasonably incurred, all further documents as may reasonably be required by the Assignee, or by its successors, assigns, nominees, or other legal representatives, to obtain said Patents in Canada and all other countries and jurisdictions for the Invention and vest or secure the same in the Assignee, and in the Assignee's successors, assigns, nominees or other legal representatives; and

grant to said Assignee, its successors, assigns, nominees or other legal representatives, including its patent agents and attorneys, the power to insert on this assignment any further information which may be necessary or desirable in order to place this document in compliance for recordation.

may issue, be granted or result therefrom for the invention, and any and all rights of priority resulting from the filing of any of the above-identified applications and any previously filed applications in respect of the invention under international conventions, treaties or otherwise, the same to be held and enjoyed fully and exclusively;

do all lawful acts and to execute and deliver, without further consideration other than expenses reasonably incurred, all further documents as may reasonably be required by the Assignee, or by its successors, assigns, nominees, or other legal representatives, to obtain said Patents in Canada and all other countries and jurisdictions for the invention and vest or secure the same in the Assignee, and in the Assignee's successors, assigns, nominees or other legal representatives; and

grant to said Assignee, its successors, assigns, nominees or other legal representatives, including its patent agents and attorneys, the power to insert on this assignment any further information which may be necessary or desirable in order to place this document in compliance for recordation.

THIS ASSIGNMENT may be executed in counterparts, all of which shall be considered one and the same agreement.

Date: 2014/04/11  
(YYYY/MM/DD)

Assignor: X

Name: LANGLAIS, Joseph

Witness: X

Name: ALAIN FORTIN NOTAIRE

Date: 2014/04/11  
(YYYY/MM/DD)

Assignor: X

Name: WAITE, Peter Donald

Witness: X

Name: ALAIN FORTIN NOTAIRE

Date: 2014/04/11  
(YYYY/MM/DD)

Assignor: X

Name: BRETTON, Francis

Witness: X

Name: ALAIN FORTIN NOTAIRE

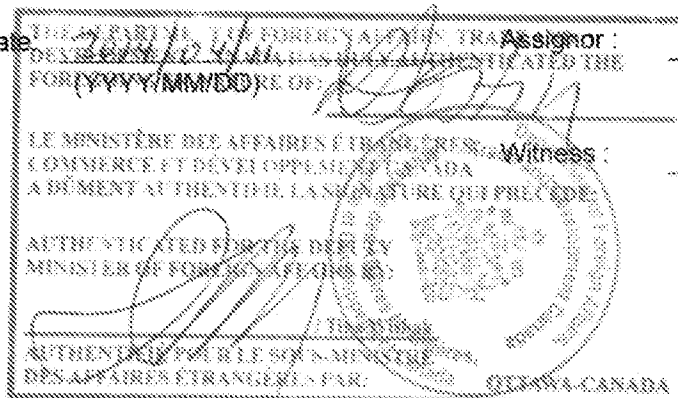
Date: 2014/04/11  
(YYYY/MM/DD)

Assignor: X

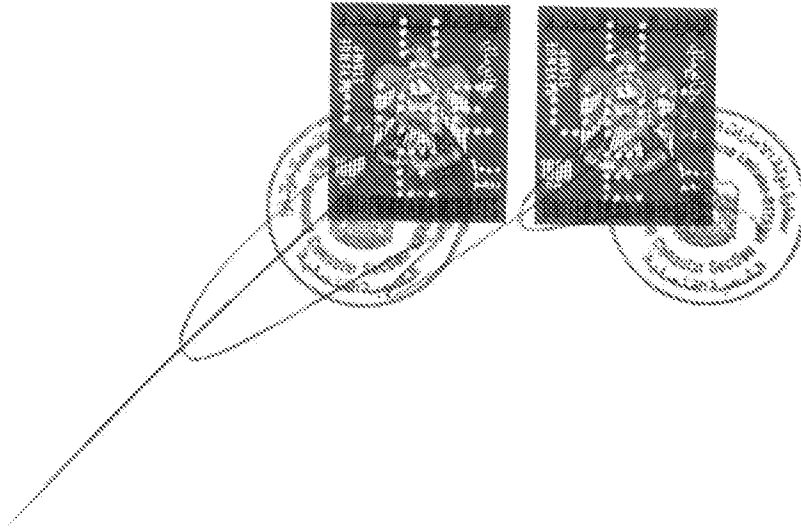
Name: MUNGER, Serge

Witness: X

Name: ALAIN FORTIN NOTAIRE



Embassy of the United Arab Emirates <b>OTTAWA</b> Consular Section		سفارة دولة الإمارات العربية المتحدة أونتاريو القنصلية العامة
No. :	3103	
Date :	16 MAY 2014	
We certify Stamp & Sign of <u>P/m</u> نحن نؤكد الختم والتوقيع من <u>P/m</u> This Embassy not responsible for the contents of the documents القنصلية العامة ليست مسؤولة عن محتوى الوثائق		
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1. Name of the Applicant 2. Name of the Invention 3. Date of Filing 4. Date of Publication 5. Date of Grant 6. Date of Renewal 7. Date of Termination 8. Date of Revocation 9. Date of Appeal 10. Date of Appeal Decision 11. Date of Appeal Decision Appeal 12. Date of Appeal Decision Appeal Decision 13. Date of Appeal Decision Appeal Decision Appeal 14. Date of Appeal Decision Appeal Decision Appeal Decision 15. Date of Appeal Decision Appeal Decision Appeal Decision Appeal 16. Date of Appeal Decision Appeal Decision Appeal Decision Appeal Decision 17. Date of Appeal Decision Appeal Decision Appeal Decision Appeal Decision Appeal 18. Date of Appeal Decision Appeal Decision Appeal Decision Appeal Decision Appeal Decision 19. Date of Appeal Decision Appeal Decision Appeal Decision Appeal Decision Appeal Decision Appeal 20. Date of Appeal Decision Appeal Decision Appeal Decision Appeal Decision Appeal Decision Appeal Decision	
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Date: 2014/04/15  
(YYYY/MM/DD)

Assignor : X [Signature]  
Name: BEAULIEU, Martin

Witness : X [Signature]  
Name:

Declaration of Witness

Each witness hereby declares that he/she was personally present and did see the inventor for which he/she is witnessing duly sign and execute the foregoing assignment on the day and year set forth above, the inventor being personally known to the witness as the person named above.