

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3244101

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ALERIS SPECIALTY PRODUCTS, INC.	02/27/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS NOTES COLLATERAL TRUSTEE
<b>Street Address:</b>	50 SOUTH SIXTH STREET
<b>Internal Address:</b>	SUITE 1290
<b>City:</b>	MINNEAPOLIS
<b>State/Country:</b>	MINNESOTA
<b>Postal Code:</b>	55402
<b>PROPERTY NUMBERS Total: 3</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	6110434
Patent Number:	6350295
Patent Number:	6077326
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(312)993-9767
<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>Phone:</b>	312-993-2622
<b>Email:</b>	gayle.grocke@lw.com
<b>Correspondent Name:</b>	GAYLE D GROCKE C/O LATHAM & WATKINS LLP
<b>Address Line 1:</b>	330 N WABASH AVENUE
<b>Address Line 2:</b>	SUITE 2800
<b>Address Line 4:</b>	CHICAGO, ILLINOIS 60611
<b>ATTORNEY DOCKET NUMBER:</b>	049646-0248
<b>NAME OF SUBMITTER:</b>	GAYLE D GROCKE
<b>SIGNATURE:</b>	/gdg/
<b>DATE SIGNED:</b>	02/27/2015
<b>Total Attachments: 6</b>	
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## PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of February 27, 2015 (as it may be amended, restated, supplemented or otherwise modified from time to time, this “**Agreement**”), is made by the entities identified as grantors on the signature pages hereto (collectively, the “**Grantors**”) in favor of Wilmington Trust, National Association, as notes collateral trustee for the Secured Parties (in such capacity, together with its successors and permitted assigns, the “**Notes Collateral Trustee**”).

**WHEREAS**, the Grantors are party to a Pledge and Security Agreement dated as of February 27, 2015 (the “**Pledge and Security Agreement**”) between each of the Grantors and the other grantors party thereto and the Notes Collateral Trustee pursuant to which the Grantors granted a security interest to the Notes Collateral Trustee in the Patent Collateral (as defined below) and are required to execute and deliver this Agreement.

**NOW, THEREFORE**, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Grantors hereby agree with the Notes Collateral Trustee as follows:

### **SECTION. 1. Defined Terms**

Unless otherwise defined herein, terms defined in the Pledge and Security Agreement and used herein have the meaning given to them in the Pledge and Security Agreement.

### **SECTION 2. Grant of Security Interest**

Each Grantor hereby grants to the Notes Collateral Trustee, for the benefit of the Secured Parties, a security interest in and continuing lien on all of such Grantor’s right, title and interest in, to and under the following, in each case whether now owned or existing or hereafter acquired, developed, created or arising and wherever located (collectively, the “**Patent Collateral**”):

all United States and foreign patents and certificates of invention, or similar industrial property rights, and applications for any of the foregoing, including, but not limited to: (i) each patent and patent application listed or required to be listed in Schedule A attached hereto, (ii) all reissues, divisions, continuations, continuations-in-part, extensions, renewals, and reexaminations thereof, (iii) all patentable inventions and improvements thereto, (iv) the right to sue or otherwise recover for any past, present and future infringement or other violation thereof, (v) all Proceeds of the foregoing, including, without limitation, license fees, royalties, income, payments, claims, damages, and proceeds of suit now or hereafter due and/or payable with respect thereto, and (vi) all other rights of any kind accruing thereunder or pertaining thereto throughout the world.

### **SECTION 3. Security Agreement**

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Notes Collateral Trustee for the Secured Parties pursuant to the Pledge and Security Agreement, and the Grantors hereby acknowledge and affirm that the rights and remedies of the Notes Collateral Trustee with respect to the security interest in the

Patent Collateral made and granted hereby are more fully set forth in the Pledge and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Pledge and Security Agreement, the provisions of the Pledge and Security Agreement shall control.

#### **SECTION 4. Governing Law**

THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER (INCLUDING, WITHOUT LIMITATION, ANY CLAIMS SOUNDING IN CONTRACT LAW OR TORT LAW ARISING OUT OF THE SUBJECT MATTER HEREOF) SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICT OF LAWS PRINCIPLES THEREOF THAT WOULD RESULT IN THE APPLICATION OF ANY LAW OTHER THAN THE LAW OF THE STATE OF NEW YORK (OTHER THAN ANY MANDATORY PROVISIONS OF LAW RELATING TO THE LAW GOVERNING PERFECTION AND THE EFFECT OF PERFECTION OF THE SECURITY INTEREST).

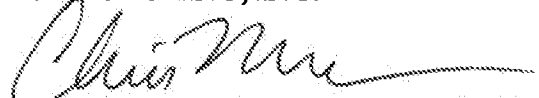
#### **SECTION 5. Counterparts**

This Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

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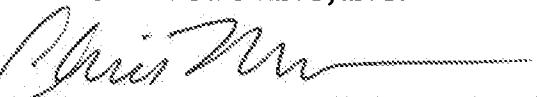
IN WITNESS WHEREOF, each Grantor has caused this Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

**ALERIS RECYCLING, INC.**

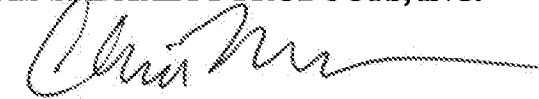
By:   
Name: Chris Manderson  
Title: Assistant Secretary

Effective upon the change of name from "Aleris Recycling, Inc." to "Real Alloy Recycling, Inc.":

**REAL ALLOY RECYCLING, INC.**

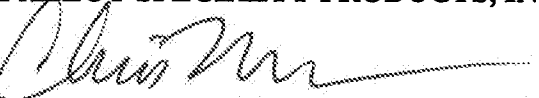
By:   
Name: Chris Manderson  
Title: Assistant Secretary

**ALERIS SPECIALTY PRODUCTS, INC.**


By:   
Name: Chris Manderson  
Title: Assistant Secretary

Effective upon the change of name from "Aleris Specialty Products, Inc." to "Real Alloy Specialty Products, Inc.":

**REAL ALLOY SPECIALTY PRODUCTS, INC.**


By:   
Name: Chris Manderson  
Title: Assistant Secretary

**ETS SCHAEFER, LLC**

By:   
Name: Chris Manderson  
Title: Assistant Secretary

Accepted and Agreed:

**WILMINGTON TRUST, NATIONAL ASSOCIATION,**  
as Notes Collateral Trustee

By:   
Authorized Signatory

[Signature Page to Patent Security Agreement]

**PATENT**  
**REEL: 035046 FRAME: 0630**

SCHEDULE A  
to  
PATENT SECURITY AGREEMENT

**PATENTS AND PATENT APPLICATIONS**

Owner	Title	Application / Patent No.	Filing / Issue Date
Aleris Specialty Products, Inc.	Recovery of Products from Non-Metallic Products Derived from Aluminum Dross	6110434	08/29/2000
Aleris Specialty Products, Inc.	Method for Densifying Aluminum Briquettes and Adding to Steel	6350295	02/26/2002
Aleris Specialty Products, Inc.	Steel Additive for Processing Molten Steel	6077326	06/20/2000
Aleris Recycling, Inc.	Metal Recovery from Salt Cake and Other Compositions	5901910	05/11/1999
Aleris Recycling, Inc.	Door Assembly for Rotary Furnace	6213763	04/10/2001
Aleris Recycling, Inc.	Door Assembly for Rotary Furnace	6435864	08/20/2002
Aleris Recycling, Inc.	Door Assembly for Rotary Furnace	6530779	03/11/2003
Aleris Recycling, Inc.	Door Assembly for Rotary Furnace	6705858	03/16/2004
Aleris Recycling, Inc.	Method and Apparatus for Supplying Molten Metal	5996677	10/07/1999
Aleris Recycling, Inc.	Potassium Fertilizer from Aluminum Reclamation By-Products	5300136	04/05/1994

Owner	Title	Application / Patent No.	Filing / Issue Date
ETS Schaefer, LLC	Furnace Door Closure System	5727479	03/17/1998
ETS Schaefer, LLC	Replaceable Heater Cover	6609908	08/26/2003
ETS Schaefer, LLC	Insulated Structure	6920731	07/26/2005