

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6599943

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
U.S. BANK NATIONAL ASSOCIATION	03/12/2021

RECEIVING PARTY DATA

Name:	AK STEEL CORPORATION
Street Address:	9227 CENTRE POINTE DRIVE
City:	WEST CHESTER
State/Country:	OHIO
Postal Code:	45069
Name:	AK STEEL PROPERTIES, INC.
Street Address:	9227 CENTRE POINTE DRIVE
City:	WEST CHESTER
State/Country:	OHIO
Postal Code:	45069

PROPERTY NUMBERS Total: 61

Property Type	Number
Patent Number:	6599371
Patent Number:	6645306
Patent Number:	6746614
Patent Number:	6802965
Patent Number:	6929705
Patent Number:	7140417
Patent Number:	7377986
Patent Number:	7887645
Patent Number:	8128754
Patent Number:	9212414
Patent Number:	9580831
Patent Number:	9816163
Patent Number:	9850395
Patent Number:	9881720
Patent Number:	6739384

PATENT

Property Type	Number
Patent Number:	6749693
Patent Number:	7011139
Application Number:	14010646
Application Number:	14279768
Application Number:	14280045
Application Number:	14279818
Application Number:	14995409
Application Number:	15160714
Application Number:	15160573
Application Number:	15211467
Application Number:	15407922
Application Number:	15583450
Application Number:	15672387
Application Number:	15723812
Application Number:	15801415
Application Number:	15788387
Application Number:	15819564
Application Number:	15924720
Application Number:	15908152
Application Number:	15903288
Application Number:	15974801
Application Number:	16051993
Application Number:	16051929
Application Number:	16179387
Application Number:	16179425
Application Number:	16263044
Application Number:	16256208
Application Number:	16296882
Application Number:	16367779
Application Number:	16371901
Application Number:	15850033
Application Number:	16546539
Application Number:	62933642
Application Number:	16775613
Application Number:	62882866
Application Number:	62808399
Application Number:	62808899
Application Number:	15935800

Property Type	Number
Application Number:	29654633
Application Number:	62834598
Application Number:	62829891
Application Number:	62829741
Application Number:	62847496
Application Number:	62847511
Application Number:	62899288
Application Number:	62930239

CORRESPONDENCE DATA

Fax Number: (216)579-0212

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.

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Email: tsinger@jonesday.com, pcyngier@jonesday.com

Correspondent Name: TYLER D. SINGER/JONES DAY

Address Line 1: 901 LAKESIDE AVENUE

Address Line 4: CLEVELAND, OHIO 44114

ATTORNEY DOCKET NUMBER: 218095-041024

NAME OF SUBMITTER: TYLER D. SINGER

SIGNATURE: /TYLER D. SINGER/

DATE SIGNED: 03/15/2021

Total Attachments: 10

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RELEASE OF SECURITY INTEREST IN PATENTS

This RELEASE OF SECURITY INTEREST IN PATENTS (this “Release”), dated as of March 12, 2021, is made by U.S. BANK NATIONAL ASSOCIATION, a national banking association, in its capacity as notes collateral agent for the Notes Secured Parties (in such capacity, “Assignor”), in favor of AK STEEL CORPORATION, a Delaware corporation (“AK Steel”), and AK STEEL PROPERTIES, INC., a Delaware corporation (“AK Properties”, and, together with AK Steel, each an “Assignee” and collectively, the “Assignees”). Capitalized terms used in this Release and not otherwise defined herein shall have the meanings set forth in the Patent Security Agreement (as defined below).

WHEREAS, Assignees and Assignor, among other parties, entered into that certain Security Agreement, dated as of December 19, 2017 (including all annexes, exhibits or schedules thereto, as from time to time amended, restated, supplemented or otherwise modified, the “Security Agreement”);

WHEREAS, pursuant to the Security Agreement, Assignees executed and delivered to Assignor that certain Patent Security Agreement, dated as of March 13, 2020 (the “Patent Security Agreement”);

WHEREAS, the Patent Security Agreement was recorded on March 13, 2020 with the U.S. Patent and Trademark Office, at Reel 052162 / Frame 0694;

WHEREAS, pursuant to the Security Agreement and the Patent Security Agreement, each Assignee pledged, assigned and granted to Assignor, for the benefit of the Notes Secured Parties, to secure the Secured Obligations, a continuing security interest (the “Security Interest”) in all of its right, title and interest in and to the following property, whether then owned by or owing to, or thereafter acquired by or arising in favor of such Assignee: (a) all of its Patents and Patent Intellectual Property Licenses to which it is a party including those referred to on Schedule I hereto, (b) all divisionals, continuations, continuations-in-part, reissues, reexaminations, or extensions of the foregoing, and (c) all products and proceeds of the foregoing, including any claim by such Assignee against third parties for past, present or future infringement of any Patent or any Patent exclusively licensed under any Intellectual Property License, including the right to receive damages, or right to receive license fees, royalties, and other compensation under any Patent Intellectual Property License (collectively, the “Patent Collateral”); and

WHEREAS, Assignor desires to release its Security Interest in the Patent Collateral.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby, without any representation, warranty or recourse, releases and discharges all right, title and interest under the Security Agreement and Patent Security Agreement (including, without limitation, the Security Interest) in the Patent Collateral, including, without limitation, the Patents set forth on Schedule 1 hereto. Any right, title or interest of Assignor under the Security Agreement and Patent Security Agreement in the Patent Collateral shall hereby cease and become void. Assignor authorizes the

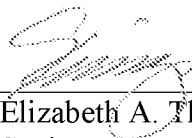
recording of this Release with the U.S. Patent and Trademark Office and hereby agrees to duly execute, acknowledge and deliver any further documents, and to do such other acts, as may be reasonably necessary to effect the release of the security interest contemplated hereby at the sole cost and expense and the reasonable request of the Assignees. This Release shall be construed in accordance with and governed by the laws of the State of New York.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Assignor has caused this Release to be duly executed by a duly authorized officer as of the date above first written.

ASSIGNOR:

U.S. BANK NATIONAL ASSOCIATION, a national banking association, as Assignor

By: 
Name: Elizabeth A. Thuning
Title: Senior Vice President

SCHEDULE I
TO
RELEASE OF SECURITY INTERESTS IN PATENTS

PATENTS

Title	Application. No	Filed	Patent No.	Grant Date	Current Owner
Hydrogen Peroxide Pickling Scheme for Silicon-Containing Electrical Steel Grades	10/119444	04/09/2002	6599371	07/29/2003	AK Steel Corporation
Hydrogen Peroxide Pickling Scheme for Stainless Steel Grades	10/118765	04/09/2002	6645306	11/11/2003	AK Steel Corporation
Method for Removing Hydrogen Peroxide From Spent Pickle Liquor	10/119112	04/09/2002	6746614	06/08/2004	AK Steel Corporation
Apparatus for Removing Hydrogen Peroxide From Spent Pickle Liquor	10/683717	10/10/2003	6802965	10/12/2004	AK Steel Properties, Inc.
Antimicrobial Coated Metal Sheet	09/938205	08/23/2001	6929705	08/16/2005	AK Steel Properties, Inc.
Method of continuous casting non-oriented electrical steel strip	11/313367	12/21/2005	7140417	11/28/2006	AK Steel Properties, Inc.
Method for production of non-oriented electrical steel strip	11/494369	07/27/2006	7377986	05/27/2008	AK Steel Properties, Inc.
High permeability grain oriented electrical steel	09/847236	05/02/2001	7887645	02/15/2011	AK Steel Properties, Inc.
Ferric pickling of silicon steel	12/616847	11/12/2009	8128754	03/06/2012	AK Steel Properties, Inc.
Meniscus coating apparatus and method	13/479382	05/24/2012	9212414	12/15/2015	AK Steel Properties, Inc.
Stainless steel pickling in an oxidizing, electrolytic acid bath	13/627022	09/26/2012	9580831	02/28/2017	AK Steel Properties, Inc.
Cost-effective ferritic stainless steel	13/855439	04/02/2013	9816163	11/14/2017	AK Steel Properties, Inc.
Polymer coated metallic substrate and method for making	12/830618	07/06/2010	9850395	12/26/2017	AK Steel Properties, Inc.
Grain oriented electrical steel with improved forsterite coating characteristics	14/468963	08/26/2014	9881720	01/30/2018	AK Steel Properties, Inc.

Title	Application. No	Filed	Patent No.	Grant Date	Current Owner
METHOD OF CONTINUOUSLY CASTING ELECTRICAL STEEL STRIP WITH CONTROLLED SPRAY COOLING	10/243020	09/13/2002	6739384	05/25/2004	AK Steel Properties, Inc.
Ferritic Stainless Steel with Excellent Oxidation Resistance, Good High Temperature Strength, and Good Formability	14/010646	08/27/2013	Pending	N/A	AK Steel Properties, Inc.
High Strength Steel Exhibiting Good Ductility and Method of Production via In-Line Heat Treatment Downstream of Molten Zinc Bath	14/279768	05/16/2014	Pending	N/A	AK Steel Properties, Inc.
High Strength Steel Exhibiting Good Ductility and Method of Production via Quenching and Partitioning Treatment by Zinc Bath	14/280045	05/16/2014	Pending	N/A	AK Steel Properties, Inc.
ZINC-COATED STEEL FOR PRESS HARDENING APPLICATIONS AND METHOD OF PRODUCTION	14/279818	05/16/2014	Pending	N/A	AK Steel Properties, Inc.
Dual Phase Steel with Improved Properties	14/995409	01/14/2016	Pending	N/A	AK Steel Properties, Inc.
LOW ALLOY THIRD GENERATION ADVANCED HIGH STRENGTH STEEL	15/160714	05/20/2016	Pending	N/A	AK Steel Properties, Inc.
HIGH MANGANESE 3RD GENERATION ADVANCED HIGH STRENGTH STEELS	15/160573	05/20/2016	Pending	N/A	AK Steel Properties, Inc.
HIGH FORMABILITY DUAL PHASE STEEL	15/211467	07/15/2016	Pending	N/A	AK Steel Properties, Inc.
WARM ROLLING OF STEELS CONTAINING METASTABLE AUSTENITE	15/407922	01/17/2017	Pending	N/A	AK Steel Properties, Inc.

Title	Application. No	Filed	Patent No.	Grant Date	Current Owner
METHOD FOR EXTENDING THE CAMPAIGN LIFE OF STABILIZERS FOR A COATING LINE	15/583450	05/01/2017	Pending	N/A	AK Steel Properties, Inc.
TUNDISH FUNNEL	15/672387	08/09/2017	Pending	N/A	AK Steel Properties, Inc.
HIGH ELONGATION PRESS HARDENED STEEL AND MANUFACTURE OF THE SAME	15/723812	10/03/2017	Pending	N/A	AK Steel Properties, Inc.
WELD WHEEL CLEANING SYSTEM	15/801415	11/02/2017	Pending	N/A	AK Steel Properties, Inc.
SURFACE MODIFICATION OF STAINLESS STEELS	15/788387	10/19/2017	Pending	N/A	AK Steel Properties, Inc.
CONTINUOUS CASTING NOZZLE DEFLECTOR	15/819564	11/21/2017	Pending	N/A	AK Steel Properties, Inc.
POLYMER COATED METALLIC SUBSTRATE AND METHOD FOR MAKING	15/924720	03/19/2018	Pending	N/A	AK Steel Properties, Inc.
HOT-ROLLED STEEL WITH VERY HIGH STRENGTH AND METHOD FOR PRODUCTION	15/908152	02/28/2018	Pending	N/A	AK Steel Properties, Inc.
PRESS HARDENED STEEL WITH EXTREMELY HIGH STRENGTH AND METHOD FOR PRODUCTION	15/903288	02/23/2018	Pending	N/A	AK Steel Properties, Inc.
SLAB REHEAT FURNACE SKID BUTTON AND METHOD TO REDUCE GOUGE OF STAINLESS STEEL SLABS	15/974801	05/09/2018	Pending	N/A	AK Steel Properties, Inc.

Title	Application. No	Filed	Patent No.	Grant Date	Current Owner
MANUFACTURING ULTRA-HIGH STRENGTH LOAD BEARING PARTS USING HIGH STRENGTH/LOW INITIAL YIELD STEELS THROUGH TUBULAR HYDROFORMING PROCESS	16/051993	08/01/2018	Pending	N/A	AK Steel Properties, Inc.
METHOD FOR FACILITATING THERMOMECHANICAL FORMING PROCESS OF AUSTENITE CONTAINING GRADES TO PRODUCE TAILORED STRENGTH STRUCTURAL COMPONENTS	16/051929	08/01/2018	Pending	N/A	AK Steel Properties, Inc.
PRESS HARDENED STEEL WITH TAILORED PROPERTIES	16/179387	11/02/2018	Pending	N/A	AK Steel Properties, Inc.
PRESS HARDENED STEEL WITH TAILORED PROPERTIES AFTER NOVEL THERMAL TREATMENT	16/179425	11/02/2018	Pending	N/A	AK Steel Properties, Inc.
METHOD AND APPARATUS FOR EXTENDING THE CAMPAIGN LIFE OF STABILIZERS FOR A COATING LINE	16/263044	01/31/2019	Pending	N/A	AK Steel Properties, Inc.
SUBMERGED ENTRY NOZZLE FOR CONTINUOUS CASTING	16/256208	01/24/2019	Pending	N/A	AK Steel Properties, Inc.
REDUCTION AT ELEVATED TEMPERATURE OF COATED STEELS CONTAINING METASTABLE AUSTENITE	16/296882	03/08/2019	Pending	N/A	AK Steel Properties, Inc.

Title	Application. No	Filed	Patent No.	Grant Date	Current Owner
POLYMER LAMINATE ON ZINC-PHOSPHATE COATED GALVANIZED STEEL	16/367779	03/28/2019	Pending	N/A	AK Steel Properties, Inc.
LOW ALLOY THIRD GENERATION ADVANCED HIGH STRENGTH STEEL AND PROCESS FOR MAKING	16/371901	04/01/2019	Pending	N/A	AK Steel Properties, Inc.
GRAIN ORIENTED ELECTRICAL STEEL WITH IMPROVED FORSTERITE COATING CHARACTERISTICS	15/850033	12/21/2017	Pending	N/A	AK Steel Properties, Inc.
ROLL FOR USE IN A HOT DIP COATING LINE	16/546539	08/21/2019	Pending	N/A	AK Steel Properties, Inc.
METHOD OF PRODUCING (110)[001] GRAIN ORIENTED ELECTRICAL STEEL USING STRIP CASTING	10/242885	09/13/2002	6749693	06/15/2004	AK Steel Properties, Inc.
METHOD OF CONTINUOUS CASTING NON-ORIENTED ELECTRICAL STEEL STRIP	10/374595	02/25/2003	7011139	03/14/2006	AK Steel Properties, Inc.
TUNDISH FUNNEL	62/933642	11/11/2019	Pending	N/A	AK Steel Properties, Inc.
HOT ROLLED STEEL WITH VERY HIGH STRENGTH AND METHOD OF PRODUCTION	16/775613	01/29/2019	Pending	N/A	AK Steel Properties, Inc.
SLAB REHEAT FURNACE SKID BUTTON AND METHOD TO REDUCE GOUGE OF STAINLESS STEEL SLABS	62/882866	08/05/2019	Pending	N/A	AK Steel Properties, Inc.

Title	Application No	Filed	Patent No.	Grant Date	Current Owner
A METHOD FOR FACILITATING THERMOMECHANICAL FORMING PROCESS OF AUSTENITE CONTAINING GRADES TO PRODUCE TAILORED STRENGTH STRUCTURAL COMPONENTS	62/808399	02/21/2019	Pending	N/A	AK Steel Properties, Inc.
PRESS HARDENED STEEL WITH TAILORED PROPERTIES	62/808899	02/22/2019	Pending	N/A	AK Steel Properties, Inc.
PRESS HARDENED STEEL WITH TAILORED PROPERTIES AFTER NOVEL THERMAL TREATMENT	15/935800	03/26/2018	Pending	N/A	AK Steel Properties, Inc.
SUBMERGED ENTRY NOZZLE FOR CONTINUOUS CASTING	29/654633	06/26/2018	Pending	N/A	AK Steel Properties, Inc.
METHOD OF COLORIZING STAINLESS STEEL USING STRIP ANNEAL PROCESSING	62/834598	04/16/2019	Pending	N/A	AK Steel Properties, Inc.
A SELF-CONTAINED WELD RESTRAINT METHOD TO PREVENT WELD ZONE FAILURE IN THE TUBE HYDROFORMING PROCESS	62/829891	04/05/2019	Pending	N/A	AK Steel Properties, Inc.
A ROLL FOR USE IN A HOT DIP COATING LINE	62/829741	04/05/2019	Pending	N/A	AK Steel Properties, Inc.
SLAB REHEAT FURNACE SKID BUTTON AND METHOD TO REDUCE GOUGE OF STAINLESS STEEL SLABS	62/847496	05/14/2019	Pending	N/A	AK Steel Properties, Inc.
CURVED SURFACE MENISCUS COATING SYSTEM	62/847511	05/14/2019	Pending	N/A	AK Steel Properties, Inc.

Title	Application No	Filed	Patent No.	Grant Date	Current Owner
COLD ROLLED ENAMELING SHEET STEEL WITH ENHANCED FORMABILITY	62/899288	09/12/2019	Pending	N/A	AK Steel Properties, Inc.
HIGH ELONGATION PRESS HARDENED STEEL AND MANUFACTURE OF THE SAME	62/930239	11/04/2019	Pending	N/A	AK Steel Properties, Inc.

PATENT LICENSES

1. Patents License Agreement, dated as of October 23, 2019, by and among AK Steel Corporation (“AKSC”), as licensee, and Arcelormittal, as licensor.
2. Patent License Agreement, dated as of December 4, 2009, between AKSC, as licensor, and JFE Steel Corporation (“JFE”), as licensee (as supplemented by the Addendum #1 to 780 Patent License Agreement, dated as of May, 2015).
3. Patent License Agreement, dated as of February 15, 2008, between AKSC, as licensor, and JFE, as licensee (as supplemented by the Addendum #1 to 980 Patent License Agreement, dated as of May, 2015).
4. Patent License Agreement, dated as of May 29, 2015, between AKSC, as licensor, and JFE, as licensee.
5. Patent License Agreement, dated as of December 17, 2013, between AKSC, as licensor, and JFE, as licensee (as supplemented by the Addendum #1 to 440BH Patent License Agreement, dated as of May, 2015).