

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT (JUNIOR FIRST LIEN)
CONVEYING PARTY DATA	
Name	Execution Date
THE CLEVELAND-CLIFFS IRON COMPANY	03/02/2016
CLIFFS NATURAL RESOURCES INC.	03/02/2016
RECEIVING PARTY DATA	
Name:	U.S. BANK NATIONAL ASSOCIATION
Street Address:	1350 EUCLID AVENUE, SUITE 1100
City:	CLEVELAND
State/Country:	OHIO
Postal Code:	44115
PROPERTY NUMBERS Total: 2	
Property Type	Number
Patent Number:	8590392
Patent Number:	5810905
CORRESPONDENCE DATA	
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ATTORNEY DOCKET NUMBER:	F161738
NAME OF SUBMITTER:	AMANDA M. MITCHELL
SIGNATURE:	/Amanda M. Mitchell/
DATE SIGNED:	03/08/2016
Total Attachments: 7	
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PATENT SECURITY AGREEMENT (JUNIOR FIRST LIEN)

This PATENT SECURITY AGREEMENT (Junior First Lien) (this “Patent Security Agreement”) is made this 2nd day of March, 2016, by and among the Grantors listed on the signature pages hereof (collectively, jointly and severally, “Grantors” and each individually “Grantor”), and **U.S. BANK NATIONAL ASSOCIATION**, a national banking association, in its capacity as notes collateral agent for the Junior First Lien Notes Secured Parties (in such capacity, together with its successors and assigns in such capacity, the “Notes Collateral Agent”).

W I T N E S S E T H:

WHEREAS, pursuant to that certain Indenture, dated as of March 2, 2016 (as amended, restated, supplemented, or otherwise modified from time to time, the “Indenture”), by and among Cliffs Natural Resources Inc., an Ohio corporation, as parent (the “Parent”), the Subsidiaries of the Parent identified on the signature pages thereof, as guarantors (the “Guarantors”), and U.S. Bank National Association, as trustee (the “Trustee”), the Parent has issued or will issue \$710,000,000 principal amount of 8.00% senior secured notes due 2020 (the “Notes”) upon the terms and subject to the conditions set forth therein;

WHEREAS, the Holders are willing to purchase the Notes as provided for in the Indenture, but only upon the condition, among others, that Grantors shall have executed and delivered to the Notes Collateral Agent, for the benefit of the Junior First Lien Notes Secured Parties, that certain Security Agreement (Junior First Lien), dated as of March 2, 2016 (including all annexes, exhibits or schedules thereto, as from time to time amended, restated, supplemented or otherwise modified, the “Security Agreement”); and

WHEREAS, pursuant to the Security Agreement, Grantors are required to execute and deliver to the Notes Collateral Agent, for the benefit of the Junior First Lien Notes Secured Parties, this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby agrees as follows:

1. **DEFINED TERMS.** All initially capitalized terms used but not otherwise defined herein have the meanings given to them in the Security Agreement or, if not defined therein, in the Indenture, and this Patent Security Agreement shall be subject to the rules of construction set forth in Section 1(b) of the Security Agreement, which rules of construction are incorporated herein by this reference, *mutatis mutandis*.

2. **GRANT OF SECURITY INTEREST IN PATENT COLLATERAL.** Each Grantor hereby unconditionally grants, assigns, and pledges to the Notes Collateral Agent, for the benefit each Junior First Lien Notes Secured Party, to secure the Secured Obligations, a continuing security interest (referred to in this Patent Security Agreement as the “Security Interest”) in all of such Grantor’s right, title and interest in and to the following, whether now owned or hereafter acquired or arising (excluding any Excluded Property, collectively, the “Patent Collateral”):

(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 Grantor 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.

3. SECURITY FOR SECURED OBLIGATIONS. This Patent Security Agreement and the Security Interest created hereby secures the payment and performance of the Secured Obligations, whether now existing or arising hereafter. Without limiting the generality of the foregoing, this Patent Security Agreement secures the payment of all amounts which constitute part of the Secured Obligations and would be owed by Grantors, or any of them, to the Notes Collateral Agent, the other Junior First Lien Notes Secured Parties or any of them, whether or not they are unenforceable or not allowable due to the existence of an Insolvency or Liquidation Proceeding involving any Grantor.

4. SECURITY AGREEMENT. The Security Interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interests granted to the Notes Collateral Agent, for the benefit of the Junior First Lien Notes Secured Parties, pursuant to the Security Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Notes Collateral Agent with respect to the Security Interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. To the extent there is any inconsistency between this Patent Security Agreement and the Security Agreement, the Security Agreement shall control.

5. AUTHORIZATION TO SUPPLEMENT. If any Grantor shall obtain rights to any new patent application or issued patent or become entitled to the benefit of any patent application or patent for any divisional, continuation, continuation-in-part, reissue, or reexamination of any existing patent or patent application, the provisions of this Patent Security Agreement shall automatically apply thereto, in each case, to the extent constituting Patent Collateral. Grantors hereby authorize the Notes Collateral Agent unilaterally to modify this Patent Security Agreement by amending Schedule I hereto to include any such new patent rights of each Grantor, in each case, to the extent constituting Patent Collateral, and subject to the terms and conditions in the Security Agreement. Notwithstanding the foregoing, no failure to so modify this Patent Security Agreement or amend Schedule I hereto shall in any way affect, invalidate or detract from the Notes Collateral Agent's continuing security interest in all Collateral, whether or not listed on Schedule I hereto.

6. COUNTERPARTS. This Patent Security Agreement is a Junior First Lien Notes Document. This Patent Security Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Patent Security Agreement. Delivery of an executed counterpart of this Patent Security Agreement by telefacsimile or other electronic method of transmission shall be equally as effective as delivery of an original executed counterpart of this Patent Security Agreement. Any party delivering an executed counterpart of this Patent Security Agreement by telefacsimile or other electronic method of transmission also shall deliver an original executed counterpart of this

Patent Security Agreement but the failure to deliver an original executed counterpart shall not affect the validity, enforceability, and binding effect of this Patent Security Agreement.

7. CHOICE OF LAW AND VENUE, JURY TRIAL WAIVER, AND JUDICIAL REFERENCE PROVISION. THIS PATENT SECURITY AGREEMENT SHALL BE SUBJECT TO THE PROVISIONS REGARDING CHOICE OF LAW AND VENUE, JURY TRIAL WAIVER, AND JUDICIAL REFERENCE SET FORTH IN SECTION 25 OF THE SECURITY AGREEMENT, AND SUCH PROVISIONS ARE INCORPORATED HEREIN BY THIS REFERENCE, *MUTATIS MUTANDIS*.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused this Patent Security Agreement to be executed and delivered as of the day and year first above written.

GRANTORS:

CLIFFS NATURAL RESOURCES INC.

By: 

Name: P. Kelly Tompkins

Title: Executive Vice President and
Chief Financial Officer

[Signature Page to 1.5 Lien Notes Patent Security Agreement]

PATENT
REEL: 038038 FRAME: 0315

THE CLEVELAND-CLIFFS IRON
COMPANY

By: 
Name: Dwayne M. Petish
Title: Treasurer

[Signature Page to 1.5 Lien Notes Patent Security Agreement]

PATENT
REEL: 038038 FRAME: 0316

NOTES COLLATERAL AGENT:

ACCEPTED AND ACKNOWLEDGED BY:

**U.S. BANK NATIONAL ASSOCIATION, a
national banking association**

By: 
Name: **ELIZABETH A. THUNING**
Title: **Vice President**

SCHEDULE I
to
PATENT SECURITY AGREEMENT

Patents

Grantor	Patent	Application/ Patent No.	Filing Date
Cliffs Natural Resources Inc.	Compression Test Systems And Methods	Application Number: 12881766 Patent Number: 8590392	9/14/10
The Cleveland-Cliffs Iron Company	Process for Making Pig Iron	Application Number: 08726812 Patent Number: 5810905	10/7/96

Patent Licenses

None.