504660143 11/28/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4706865

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| MARY AMELIA WALKER | 07/17/2017 |
| ROBERT CATRON | 07/17/2017 |

RECEIVING PARTY DATA

| Name: | FREEPORT-MCMORAN INC. |
|-----------------|--------------------------|
| Street Address: | 333 NORTH CENTRAL AVENUE |
| City: | PHOENIX |
| State/Country: | COLORADO |
| Postal Code: | 85004 |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 15376044 | |

CORRESPONDENCE DATA

Fax Number: (303)291-3201

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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Correspondent Name: FENNEMORE CRAIG P.C. Address Line 1: 1700 LINCOLN STREET

SUITE 2400 Address Line 2:

Address Line 4: DENVER, COLORADO 80203

| ATTORNEY DOCKET NUMBER: | FMI US-108 (028851.0380) | |
|-------------------------|--------------------------|--|
| NAME OF SUBMITTER: | BRUCE E. DAHL | |
| SIGNATURE: | /Bruce E. Dahl/ | |
| DATE SIGNED: | 11/28/2017 | |

Total Attachments: 2

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PATENT REEL: 044239 FRAME: 0292 504660143

ASSIGNMENT

This Assignment is made and executed by Mary Amelia Walker and Robert Catron (hereinafter "Assignors"), to and in favor of Freeport-McMoRan Inc., having a business address of 333 North Central Avenue, Phoenix, AZ 85004, U.S.A. (hereinafter "Assignee").

Whereas each of the Assignors desires to assign his/her entire right, title and interest in and to the invention described in Application No. 15/376,044, filed on **December 12**, 2016, and titled "SYSTEMS AND METHODS OF DETERMINING ROAD QUALITY" (hereinafter the "Patent Application"), for valuable consideration; and whereas Assignee has provided such valuable consideration to the Assignors.

Accordingly, the Assignors warrant, covenant, and agree as follows:

- I. Each of the Assignors hereby sells, assigns, and conveys to Assignee such Assignor's entire right, title, and interest in and to the invention described in the Patent Application, including (i) the Patent Application itself and any substitute patent application based in whole or in part on the Patent Application, (ii) all national and regional patent applications claiming the priority of the Patent Application or resulting from or based on the Patent Application, whether pursued as a patent, an inventor's certificate, a utility model or the like, including all rights of priority based on the Patent Application, and all substitute, continuation, continuation-in-part and divisional applications based in whole or in part on any such national or regional applications, and (iii) all patents, inventor's certificates, utility models and the like resulting from any of the such applications, and any reissues and extensions thereof.
- 2. Each of the Assignors hereby sells, assigns, and conveys to Assignee such Assignor's entire right, title, and interest in and to (i) all counterparts to all or any part of the Patent Application that are not included in Paragraph 1 above and that have been or may be filed in any country or under the Patent Cooperation Treaty or other international treaty, whether pursued as a patent, an inventor's certificate, a utility model or the like, including all rights of priority based on the Patent Application or any counterpart, and all substitute, continuation, continuation-in-part and divisional applications based in whole or in part on any of the counterparts, and (iii) including all patents, inventor's certificates, utility models resulting from any of the counterparts, any reissues and extensions thereof.
- 3. Each of Assignors hereby grants to Assignee the sole and exclusive right to prosecute the Patent Application and all related applications as described in Paragraphs 1 and 2 above, as well as any opposition proceedings, reissue applications, reexaminations, and nullity or invalidity proceedings. Each of the Assignors authorizes all governmental bodies having the power to issue patents, inventor's certificates or utility models to issue a patent, inventor's certificate or utility model based on the Patent Application or any related applications as described in Paragraphs 1 and 2 above in the name of Assignee.
- 4. Each of the Assignors agrees upon request and without further consideration, but at Assignee's expense: (a) to assist Assignee in prosecuting the Patent Application and all related applications as described in Paragraphs 1 and 2 above, as well as opposition proceedings, reissue applications, reexaminations, and nullity or invalidity proceedings; (b) to provide Assignee with information concerning the Patent Application and the related applications described in Paragraphs 1 and 2 above to enable Assignee to obtain, secure and protect all of the rights, title and interest sold, assigned, conveyed and granted under this Assignment (the "Assigned Assets"); (c) to sign papers, take oaths and testify in legal proceedings to enable Assignee to obtain, secure and protect the Assigned Assets; and (d) to perform all acts reasonably necessary to enable Assignee to obtain, secure and protect the Assigned Assets,

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including assistance in any proceedings pertaining to the Patent Application and the related applications described in Paragraphs 1 and 2 above or to their enforcement.

- Each of the Assignors warrants and covenants that such Assignor has the full right to sell, assign and convey the Assigned Assets, and that to his/her knowledge all of the Assigned Assets are free and clear of all mortgages, liens, security interests, charges, claims, royalty obligations and encumbrances of any nature whatsoever and that the Assignor has not executed and will not execute any agreement in conflict with this Assignment.
- Assignee may assign the Assigned Assets in whole or in part. All references herein to Assignee include any successors or assigns of Assignee.
- Each of the Assignors hereby authorizes any member of the firm of Fennemore Craig, P.C. to insert or complete any information, including but not limited to the patent application serial number,

| needed to effect this document's reco organization or office that provides for the | | |
|--|--|---|
| the Assigned Assets. | 1/2/2 | |
| 7/17/17 Date | 1/24/1 | |
| Date | Mary Amélia Walker | Kim. |
| State of $A \cap 20 \cap 2 $ ss. | | |
| County of 11 (21 (C) (42) | | |
| On this 14 day of 5014 to be the person whose name is subscribed to the wiinstrument for the purposes therein contained. | , 207, before me personally appea ithin instrument, and acknowledged to | red Mary Amelia Walker known to me Methat she executed the foregoing |
| My commission expires: Scale 25, 20, 7 | NOTARY POBLIC | KE |
| ALLISON L. PORTER Notary Public - State of Articose MARICOPA COUNTY My Commission Expires Sept. 28, 2017 | | |
| | 1 Commission of the Commission | |
| 7 17/17 | | , , , , , , , , , , , , , , , , , , , |
| Date | Robert Catron | |
| State of <u>ANZUND</u> | | |
| County of Management | | |
| On this 12 day of 32k4 | 2002 before me personally appea | red Robert Catron known to me to be |
| the person whose name is subscribed to the within is instrument for the purposes therein contained. | restrimenty and acknowledged to me in | at the executed the foregoing |
| My commission expires: Sept 95,3017 | (NOTARY PUBLIC) | |
| ALLISON L. PORTER Noticy Public - State of Anticom MARICOPA COUNTY | | |