

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
KYUNG BOOK LEE	01/26/2018
JONG GEUN CHOE	01/26/2018
WON SUK LEE	01/26/2018
HYUN SUK LEE	01/26/2018
TAE WOONG AHN	01/26/2018
TAE HUN LEE	01/26/2018
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<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15749564
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<b>SIGNATURE:</b>	/John A. Castellano/
<b>DATE SIGNED:</b>	02/02/2018
<b>Total Attachments: 3</b>	

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**DECLARATION AND ASSIGNMENT<sup>1</sup>**

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application entitled:

**ENSEMBLE-BASED RESERVOIR CHARACTERIZATION METHOD USING MULTIPLE  
KALMAN GAINS AND DYNAMIC DATA SELECTION**

As a below named inventor, I hereby declare that:

This declaration is directed to (check one):

- ☒ The attached application, or  
☐ United States application \_\_\_\_\_ filed on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application.

I hereby acknowledge that any willful false statement made in this Declaration and Assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

For good and valuable consideration, the receipt and adequacy whereof I hereby acknowledge, I hereby confirm any prior assignment to **Korea Institute of Geoscience and Mineral Resources**, 124, Gwahak-ro, Yuseong-gu, Daejeon, 34132, Republic of Korea (hereinafter "Assignee"), and to the extent that I have not already done so, agree to assign, and hereby do, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the above-identified application, to the above-

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<sup>1</sup> This form requires an ADS if one has not yet been filed.

## **DECLARATION AND ASSIGNMENT**

identified application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the above-identified application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by me had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights.

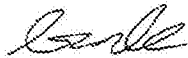
I hereby covenant and agree to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, any derivation proceedings relating thereto, and as to Letters Patent any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth.


I covenant not to challenge the validity or ownership of, or assist anyone else challenging the validity or ownership of, any patent issuing on the application or claiming priority thereto, whether in the courts or before a government agency, including reexaminations, inter partes reviews post grant reviews, covered business method reviews, derivation proceedings, or any other proceeding where the validity or scope or ownership of the patent is at issue.

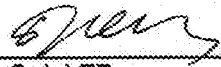
I hereby request the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and request that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

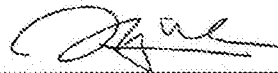
DECLARATION AND ASSIGNMENT

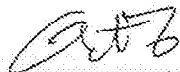
I hereby grant the law firm of Harness, Dickey & Pierce, P.L.C. the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

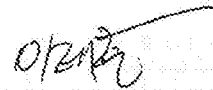
  
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 26 Jan 2018  
 Dated

  
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 Jan. 26, 2018  
 Dated

  
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 Dated

  
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 26 JAN. 2018  
 Dated

  
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 26 Jan 2018  
 Dated