501926481 05/18/2012

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Herbert T. Schaef	03/12/2012
B. Peter McGrail	03/12/2012

RECEIVING PARTY DATA

Name:	Battelle Memorial Institute	
Street Address:	902 Battelle Boulevard	
Internal Address:	P.O. Box 999	
City:	Richland	
State/Country:	WASHINGTON	
Postal Code:	99352	

PROPERTY NUMBERS Total: 2

Property Type	Number	
Application Number:	13410696	
PCT Number:	US2012027442	

CORRESPONDENCE DATA

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via US Mail.

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NAME OF SUBMITTER: Robert	C. Hyta

PATENT REEL: 028236 FRAME: 0290 \$80.00 13410696

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Total Attachments: 4

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> PATENT REEL: 028236 FRAME: 0291

ASSIGNMENT

PARTIES TO THE ASSIGNMENT:

INVENTORS:

Herbert T. Schaef

B. Peter McGrail

ASSIGNEE:

Battelle Memorial Institute 902 Battelle Boulevard P.O. Box 999 Richland, WA 99352

United States

BACKGROUND OF THIS ASSIGNMENT:

Inventors have conceived certain new and useful inventions disclosed

in United States Patent Application No. 13/410,696 filed March 2, 2012,

entitled "Downhole Fluid Injection Systems, CO2 Sequestration Methods,

and Hydrocarbon Material Recovery Methods", and PCT Patent Application

No. PCT/US12/27442 filed March 2, 2012, entitled "Downhole Fluid Injection

Systems, CO₂ Sequestration Methods, and Hydrocarbon Material Recovery

Methods", both of which claim priority to United States Provisional Patent

Application No. 61/448,879 filed March 3, 2011.

Battelle Memorial Institute (hereinafter referred to as "ASSIGNEE")

desires to acquire the entire right, title and interest in said inventions and

1 of 4

with respect to any Letters Patent that may be granted with respect to the inventions in both the United States and in all foreign countries.

THE PARTIES AGREE AS FOLLOWS:

In consideration of good and valuable consideration, the receipt,

sufficiency and adequacy of which is hereby acknowledged, INVENTORS

have sold, assigned and transferred, and by these present do hereby sell,

assign and transfer to ASSIGNEE the entire right, title and interest in the

above-identified inventions and application and to any reissues, renewals,

divisions or continuations of the application thereof, and hereby authorizes

the Commissioner of Patents and Trademarks to issue such Letters Patent

to ASSIGNEE for the sole use of ASSIGNEE, its successors or assigns.

INVENTORS further agree to execute, at the request and expense of

ASSIGNEE, such other formal documents as may be required to fully convey

the interest transferred herein and will similarly execute any patent

application papers (foreign or domestic) required for the filing of any

divisional, continuation, renewal or reissue of the patent application or

resulting Letters Patent; and will generally do everything necessary or

desirable to obtain and enforce proper protection for the inventions assigned

hereby.

INVENTORS further assign to ASSIGNEE the whole right, title and

interest in the inventions disclosed in the application throughout all

countries foreign to the United States. ASSIGNEE is hereby authorized to

apply for patents relating to the inventions in its own name in countries

2 of 4

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PATENT REEL: 028236 FRAME: 0293 where such procedure is proper; to claim the benefit of the International Convention; to file and prosecute International Applications relating to the inventions under the Patent Cooperation Treaty; and to file and prosecute applications relating to the inventions under the European Patent Convention. INVENTORS agree to execute applications relating to the inventions in those countries and under those conventions where it is necessary that the same be executed by the inventor, and to execute assignments of such applications and the resulting Letters Patent to ASSIGNEE as well as all other necessary papers in relation to such applications and Letters Patent. INVENTORS hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country as proof of the right of ASSIGNEE to apply for patent and other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

To be binding on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

Signed at Richland	Washington, on <u>∅३−≬2</u> , 2012.
[city]	[state] / /
	_ sord Achau
	Herbert T. Schaef
State of WASHINGTON)
County of <u>BENTON</u>) ss.)
On <u>March 12</u> personally appeared Herbert T.	, 2012, before me, a Notary Public, Schaef, who is known to me to be the

3 of 4

person whose name is subscribed within the foregoing Assignment, who executed the Assignment and acknowledged such execution to be voluntary and for the purposes set forth therein.

SEAL SEAL SEAL SEAL SEAL SEAL SEAL SEAL	Notary for the State of WASHINGTON residing at [City] Commission Expires: 29/10	
Signed at Richland [city]	Washington, on 3/12, 2012. [state] B. Peter McGrail	
State of <u>WASHINGTON</u> County of <u>BENTON</u>)) ss.)	
On <u>Navely</u> , 2012, before me, a Notary Public, personally appeared B. Peter McGrail, who is known to me to be the person whose name is subscribed within the foregoing Assignment, who executed the Assignment and acknowledged such execution to be voluntary and for the purposes set forth therein.		
SEAL WASHING	Notary for the State of WASHINGTON residing at [City] Commission Expires:	

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RECORDED: 05/18/2012

4 of 4