502113680 11/01/2012

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Roe-Hoan Yoon	11/10/2011
Mert Kerem Eraydin	08/03/2012
Chad L. Freeland	08/03/2012

RECEIVING PARTY DATA

Name:	Virginia Polytechnic Institute and State University
Street Address:	301 Burruss Hall
City:	Blacksburg
State/Country:	VIRGINIA
Postal Code:	24061

PROPERTY NUMBERS Total: 1

Property Type	Number
PCT Number:	US1123161

CORRESPONDENCE DATA

Fax Number: 5409515292

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (540) 951-9374
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Correspondent Name: Virginia Tech Intellectual Properties
Address Line 1: 2200 Kraft Drive, Suite 1050
Address Line 4: Blacksburg, VIRGINIA 24060

ATTORNEY DOCKET NUMBER:	VTIP 10-074 PCT
NAME OF SUBMITTER:	Mark S. Coburn

Total Attachments: 3

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> PATENT REEL: 029223 FRAME: 0258

OF \$40.00 US1123161

502113680

Serial Number: PCT/US2011/023161

ASSIGNMENT

WHEREAS, I/we, the below-named inventor(s) (hereinafter referred to as ASSIGNORS) whose residence address is stated below, have invented certain new and useful improvements in an invention entitled:

Cleaning and Dewatering Fine Coal

for which an application for United States Letters Patent Serial No. <u>PCT/US2011/023161</u> has been filed on 1/31/2011; and

WHEREAS, Virginia Polytechnic Institute and State University, (hereinafter referred to as ASSIGNEE), an institute of higher education organized under the laws of the Commonwealth of Virginia, having an office and principal place of business at 301 Burruss Hall, Blacksburg, Virginia, 24061, is desirous of acquiring the entire right, title and interest in, to and under said application and said invention and in, to and under Letters Patent or similar legal protection to be obtained therefore in the United States and in any and all foreign countries.

NOW, THEREFORE, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer to ASSIGNEE, its lawful successors and assigns, the full and exclusive right, title and interest to said invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries and any non-provisional applications claiming the benefit of said application to be obtained for said invention by said application or any continuation, division, continuation-in-part, reexamination, renewal, substitute, extension or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted; and authorize and request the Commissioner of Patents of the United States and any official of any foreign country whose duty it is to issue patents or legal equivalents thereto, to issue same for this invention to ASSIGNEE, its lawful successors and assigns.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue, enforce and defend said application, said invention and said Letters Patent and said equivalents thereof in any foreign country which may be necessary or desirable to carry out the purposes thereof.

PATENT REEL: 029223 FRAME: 0259

Serial Number: PCT/US2011/023161
Full Name of Inventor: Roe-Hoan Yoon Residence: 2909 Wakefield Drive, Blacksburg, VA 24060
Signature: Date:
County of Montgothery State of Vivoyath The foregoing instrument was acknowledged before me this 10th day of November, 2011 by Kol-Hain Joon Maleus June Make
KAREN LYNN MABRY NOTARY PUBLIC REGISTRATION # 7500436 COMMONWEALTH OF VIRGINIA MY COMMISSION EXPIRES JANUARY 31, 2015 Notary Public Notary Public Notary Registration Number: My Commission Expires: My Commission Expires:
Full Name of Inventor: Mert Kerem Eraydin Residence: 701 Palmer Drive, Blacksburg, VA 24060
Signature: Date: D8 70.5 1012 County of Montgomery
The foregoing instrument was acknowledged before me this 3rd day of August 2017 Kum

Notary Public

Notary Registration Number: _ My Commission Expires: ____

VTIP 10-074

KAREN LYNN MABRY
NOTARY PUBLIC
REGISTRATION # 7500436
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES
JANUARY 31, 2015

PATENT REEL: 029223 FRAME: 0260

VTIP 10-074	
Serial Number: PCT/US2011/02316	1
Full Name of Inventor: Chad L. Free	
Residence: 12 Linney Street, Apt 4,	P.O. Box 233, Babbitt, Minnesota 57706
Signature: Chad L Freel	and Date: 8/3/12
	NACL CLIPPO
County of St Ladis State of MN	
•	nowledged before me this 3 day of Acrost , 2012
by Chad (Freela)	
	tennel Keldis
Penny M. Reedy	Notary Public /
Notary Public	Notary Registration Number: My Commission Expires: 1-31-16
Minnesota	My Commission Expires: 1-31-10
My Commission Expires January 31, 2016	

PATENT REEL: 029223 FRAME: 0261

RECORDED: 11/01/2012