Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)

U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Offi

To the Director of the U.S. Patent and Tredemerk Office: Please record the attached documents or the new address(ea) below. 1. Name of conveying party(les) Velocys, Inc. 2. Name and address of receiving party(les) Name: United States Department of Energy Internal Address: Additional name(s) of conveying party(les) attached? Yes Yos No Street Address: 1000 Independence Ave. S.1 City: Washington State: D.C. Country: USA Zip: 20585 Country: USA Zip: 20585 Additional name(s) & address(es) attached? Yes Yos Additional name(s) & address(es) attached? Yes Yos Additional number attached? Yes Yos 6. Name and address to whom correspondence concerning document should be mailed: Name: Mark P. Dvorscak Internal Address: U. S. Dept. of Energy, IPLD Street Address: 9800 S. Cass Ave City: Argonne State: II Zip:60439 Phone Number: 630-252-2779 Email Address: Authorized User Name Authorized User Name	PSL	PATENTS ONLY RECORDATION FORM COVER SHEET S-113,407		
Velocys, Inc. 2. Name and address of receiving party(les) Velocys, Inc. Additional name(s) of conveying party(lee) attached? Yes No Additional name(s) of conveying party(lee) attached? Yes No Execution Date(s) October 19, 2011 Assignment	To the Director	Of the U.S. Patent and Tondoned Office St	IS ONLY	
Street Address: 1000 Independence Ave., S.) Execution Date(s) October 19, 2011 Assignment	1. Name of conveying party(les)		2. Name and address of receiving party(les) Name: United States Department of Energy	
Security Agreement Change of Name Joint Research Agreement Government Interest Assignment State: D.C.	3. Nature of conveyance/Execution Date(s): Execution Date(s) October 19, 2011		Street Address: 1000 Independence Ave., S.W	
Additional name(s) & address(es) attached? Yes A. Application or patent number(s): A. Patent Application No.(s) Serial No. 12/184,843 Additional numbers attached? Yes No. Additional number of applications and patents involved: 1 Total reference (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title graph of the count of the cou	Security Agre Joint Researce Government i	ement Change of Name th Agreement nterest Assignment	State: <u>D.C.</u>	Zip:20585
5. Name and address to whom correspondence concerning document should be mailed: Name: Mark P. Dvorscak Internal Address; U. S. Dept. of Energy, IPLD Street Address: 9800 S. Cass Ave City: Argonne State: Zip:60439 Phone Number: 630-252-2393 Fax Number: 630-252-2779 Email Address: Signature:	Other 4. Application or A. Patent Applicat	patent number(s):	document is being filed to	ress(es) attached? Yes Vo
Name: Mark P. Dvorscak Internal Address: U. S. Dept. of Energy, IPLD Street Address: 9800 S. Cass Ave City: Argonne State: II Zip:60439 Phone Number: 630-252-2393 Fax Number: 630-252-2779 Email Address: 12-8-U 7. Total fee (37 CFR 1.21(h) & 3.41) \$ Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed V None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number Authorized User Name	5. Name and add concerning docu	ress to whom correspondence	6. Total number of app	plications and patents
Street Address: 9800 S. Cass Ave □ None required (government interest not affecting title City: Argonne State: □ Zip:60439 □ None required (government interest not affecting title 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number Authorized User Name □ 2 - 8 - U			7. Total fee (37 CFR 1.	harged by credit card
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Expiration Date Columb	City: <u>Argonne</u>			
Phone Number: 630-252-2393 Fax Number: 630-252-2779 Email Address:		Zip:60439	a. Credit Card Last	4 Numbers
12-8-4	ax Number: <u>630</u>	0-252-2393	b. Deposit Account N	Number
Mark C. Lang #55,356 Name of Person Signing Total number of pages including cover sheet, attachments, and documents:	. Signature:	Mark C. Lang #55,356	Total numbe	Date or of pages including cover

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:

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PATENT



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CONFIRMATORY LICENSE

October 19, 2011

Intellectual Property Law Division U.S. Department of Energy Chicago Operations Office 98000 South Cass Avenue Argonne, IL 60439

Reference:

DOE Contract Number DE-FC26-03NT41905

Project Title: Upgrading Methane Streams with Ultra Fast TSA

To whom it may concern:

In accordance with its obligations under the referenced contract, Velocys, Inc. ("Contractor of DOE") hereby reports the following invention as a "Subject Invention" and hereby has elected to retain title thereto.

Title of Invention:	Methods for applying microchannels to separate methane using liquid absorbents, especially ionic liquid absorbents from a mixture	
	comprising methane and nitrogen	
Inventor(s):	Anna Lee Y. Tonkovich, Robert D.	
	Litt, Dongming Qiu, Laura J. Silva,	
	Micheal Jay Lamont, Maddalena	
	Fanelli, Wayne W. Simmons, Steve	
	Репту	
Patent Application Serial No.:	12/184,843	
Filing Date:	08/01/2008	
Patent Number:	US 8,029,604 B2	
Issued Date:	10/04/2011	
Name of Contractor:	Velocys, Inc.	
DOE Case Number:	DE-FC26-03NT41905	
Contractor Docket Number:	07-024A	

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, paid-up, worldwide license in this subject invention, patent application and any resulting patent, including any continuation, divisional, reissue, or supplemental application thereof, to practice or to have practiced for or on behalf of the United States throughout the world; and of all other rights acquired by the Government by the patent rights clause in the above-identified contract.

> **PATENT REEL: 027395 FRAME: 0852**

It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the above-identified subject invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Please contact me with any questions at 614-733-3313 or silva@velocys.com.

Sincerely,

Signature: Laura J. Silva, Director, IP, Legal, and Licensing

Enclosures: United States Patent

PATENT REEL: 027395 FRAME: 0853

RECORDED: 12/12/2011