PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Walter David Vann	12/12/2012
Daniel Paul Leta	12/12/2012
Jonathan Martin McConnachie	12/10/2012
Richard Alan Demmin	12/20/2012
Douglas Wayne Hissong	12/17/2012
William C. Baird Jr.	02/04/2013
Roby Bearden Jr.	01/14/2013
James Ronald Bielenberg	12/17/2012
Howard Freund	12/19/2012
Chris Aaron Wright	12/17/2012
Michael Francis Raterman	01/21/2013
James Ronald Rigby	01/06/2013
Brandon Thomas Stone	01/06/2013

RECEIVING PARTY DATA

Name:	ExxonMobil Research and Engineering Company
Street Address:	1545 Route 22 East
Internal Address:	P.O. Box 900
City:	Annandale
State/Country:	NEW JERSEY
Postal Code:	08801-0900

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13693222

CORRESPONDENCE DATA

9087303649 Fax Number:

PATENT REEL: 029914 FRAME: 0579 Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 908-730-3605

Email: kimberly.m.shapiro@exxonmobil.com

Correspondent Name: ExxonMobil Research and Engineering Co.

Address Line 1: 1545 Route 22 East

Address Line 2: P.O. Box 900

Address Line 4: Annandale, NEW JERSEY 08801-0900

ATTORNEY DOCKET NUMBER: 2011EM385-US2

NAME OF SUBMITTER: Bruce M. Bordelon

Total Attachments: 10

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PATENT REEL: 029914 FRAME: 0580

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone

Date_

Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright Jonathan Martin McConnachie Roby Bearden, Jr. Michael Francis Raterman

Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

invention or improvement entitled	and to all patent	applications and pat	ents covering sai	me which is descr	ibed in a patent application
ALKALI METAL	HYDROPROCE:	SSING OF HEAVY		NHANCED REM	OVAL OF COKE
said application having bee further identified as Case N international conventions or	umber		9,20 I day(s) of F	December January Elonuary d by said application	2012 2013 2013, and being on under provisions of
relating to obtaining pater applications or substitutes the	ts and the prosec terefore or registra	ution thereof for sa- tions thereof, and an	id invention or a v specific separat	improvement, and te assignments of a	ications for and documents any continuations of such ny of the above required for NEE may deem necessary or
patent issued thereon, or an	y reissue or applica erate with ASSIG	ation for the reissue to NEE to the best of the state of	hereof, becoming the ability of UN	involved in priori	vention or improvement, or ty of invention proceedings, the matter of preparing and
and foreign patents covering	g said invention or	improvement and to	vest all rights the	erein hereby conve	acts to obtain United States yed to ASSIGNEE, as fully and sale had not been made.
5) UNDERSIGNED executed the Declaration for	O hereby authorize the above-referen	e(s) ASSIGNEE to in ced patent application	nsert in this instr n.	ument the date(s)	on which UNDERSIGNED
IN WITNESS WHEREOF, NAME. Date 12/12/12	Inventor /	has been executed b	y UNDERSIGN	ED on the date of	pposite UNDERSIGNED's
Date	Inventor	el Paul Leta	(LS)	Witness	
Date	InventorJonat	than Martin McConnachie	(LS)	Witness	
Date	InventorRich	ard Alan Demmin	(LS)	Witness	
Date	Inventor		(LS)	Witness	

Douglas Wayne Hissong

Willaim C. Baird, Jr.

Inventor_

(LS) Witness PATENT REEL: 029914 FRAME: 0581

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone

Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright

Jonathan Martin McConnachie Roby Bearden, Jr. Michael Francis Raterman Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

REEL: 029914 FRAME: 0582

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

ALKALI METAL HYDROPROCESSING OF HEAVY OILS WITH ENHANCED REMOVAL OF COKE

	PRODUCTS		
١	0,12,17,19,20	December January	2012 2013
said application having been executed on the	e <u>4</u>	day(s) of Farman	2013, and being
further identified as Case Number	; and all rights of pr	iority created by said application	n under provisions of
international conventions or treaties.			-

- 2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefore or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.
- 3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.
- 4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.
- 5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED'S NAME.

Date	Inventor	LS)	Witness
Date 12/12/15	10/	LS)	Wirness Maion Mannonle
Date 12/10/12	Inventor Janathan Martin-McConnachie		Witness Redo M. Marshall.
Date 12/20/12	Inventor Level A John (1) Richard Alan Demmin	LS)	Winessado M. Marshall
Date	Inventor(I	LS)	Witness
Date	Inventor(L	LS)	WitnessPATENT

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright Jonathan Martin McConnachie Roby Bearden, Jr. Michael Francis Raterman

Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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entitiea					
ALKALI METAL HY	DROPROC	ESSING OF HEAVY	OILS WITH E	NHANCED REMO	OVAL OF COKE
said application having been ex	recuted on the	PRODUC 10,12,17,19,21 6,14,21	D day(s) of	December January February	2012 2013 2013, and being
further identified as Case Num international conventions or tre	Der	; and all rights o	f priority create	d by said application	n under provisions of
2) UNDERSIGNED a relating to obtaining patents a applications or substitutes there recording in the United States I expedient.	and the prose efore or regist	ecution thereof for said	d invention or specific separa	improvement, and te assignments of ar	v of the above required for
 UNDERSIGNED ag patent issued thereon, or any re UNDERSIGNED will coopera executing all documents and gi 	issue or appli te with ASSI	ication for the reissue th GNEE to the best of the	ereof, becoming ne ability of UN	involved in priority	ention or improvement, or y of invention proceedings, ne matter of preparing and
4) UNDERSIGNED ag and foreign patents covering sa and as entirely as the same wou	ad invention o	or improvement and to	vest all rights th	erein hereby convey	cts to obtain United States yed to ASSIGNEE, as fully and sale had not been made.
5) UNDERSIGNED he executed the Declaration for the	ereby authori above-refere	ze(s) ASSIGNEE to insenced patent application	sert in this instr	ument the date(s) o	n which UNDERSIGNED
IN WITNESS WHEREOF, the NAME.	is assignment	t has been executed by	UNDERSIGN	ED on the date op	posite UNDERSIGNED's
Date	InventorW	alter David Vann	(LS)	Witness	
Date	InventorDa	niel Paul Leta	(LS)	Witness	
Date	InventorJor	nathan Martin McConnachie	(LS)	Witness	
Date	InventorRic	chard Alan Demmin	(LS)	Witness	
Date DEC 17, 2012	Inventor Do	onglas Wayne uglas Wayne Hissons	Thistong	Witness Str	Finance Freeman
Date	InventorWil	llaim C. Baird, Jr.	(LS)		ATENT14 FRAME: 0583

ASSIGNMENT INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright

Jonathan Martin McConnachie Roby Bearden, Jr. Michael Francis Raterman

Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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ALKALI METAL HYD	ROPROCESS	SING OF HEAV	Y OILS WITH	I ENHANCED REM	IOVAL OF COKE
	i	PROD 0,12,17,19	20	December	2012
said application having been exec further identified as Case Number international conventions or treati	Γ	; and all right	day(s) of s of priority cre	February ated by said applicati	2013, and being on under provisions of
 UNDERSIGNED agree relating to obtaining patents and applications or substitutes thereforecording in the United States Pater expedient. 	re or registration	on thereof for s	said invention	or improvement, and	
3) UNDERSIGNED agree patent issued thereon, or any reiss UNDERSIGNED will cooperate executing all documents and givin	ue or applicati with ASSIGN	on for the reissue EE to the best o	thereot, become f the ability of	ing involved ini	vention or improvement, or ity of invention proceedings, the matter of preparing and
	e(s) to perform	upon ASSIGNE	EE's request any	therein haraby cons	acts to obtain United States eyed to ASSIGNEE, as fully and sale had not been made
	by authorize(s) ASSIGNEE to	insert in this in		on which UNDERSIGNED
IN WITNESS WHEREOF, this NAME.		• •		GNED on the date o	pposite UNDERSIGNED's
Date	nventorWalter	David Vann	(LS) Witness	
Date I	nventorDaniel	Paul Leta	(LS) Witness	
Date I.	nventor Jonatha	n Martin McConnach	(LS)	Witness	
Date	nventorRichard	Alan Demmin	(LS)	Witness	
Date	nventorDouglas	s Wayne Hissong	(LS)	Witness	
Date 03/04/13 b	wentor Willaim	C. Baird, Jr.	(LS)		PAGENTBAL 1914 FRAME: 0584

USSN 13/693222

Filed: December 4, 2012

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann **Douglas Wayne Hissong Howard Freund Brandon Thomas Stone**

Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright

Inventor

Inventor_

Michael Francis, Raterman

James Ronald Rigby

Jonathan Martin McConnachie Roby Bearden, Jr. Michael Franics Raterman

Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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collectively as ASSIGNEE, t UNDERSIGNED's invention of patent application entitled	he entire or improv	right, title and interest vement and to all patent	t, for the United applications and p	States and all foreignatents covering same	in countries, in and to which is described in a
ALKALI METAL HY	DROPR	OCESSING OF HEAV	Y OILS WITH E	NHANCED REMOV	AL OF COKE
said application having been ex further identified as Case Numb					
further identified as Case Numbinternational conventions or tre	peraties.	; and all right	s of priority create	ed by said application t	ANZ, and being under provisions of
 UNDERSIGNED ag relating to obtaining patents a applications or substitutes there for recording in the United St necessary or expedient. 	nd the pr efore or re	egistrations thereof, and	iid invention or in any specific separ	mprovement, and any	continuations of such
 UNDERSIGNED ag patent issued thereon, or any proceedings, UNDERSIGNED preparing and executing all doc 	will coop	perate with ASSIGNEE	reissue thereof, b to the best of the	ecoming involved in ability of UNDERSIC	priority of invention
 UNDERSIGNED again foreign patents covering safully and as entirely as the sambeen made. 	na inveni	perform upon ASSIGNED tion or improvement and have been held and enjo	l to vest all rights	therein hereby conve	ved to ASSIGNEE as
UNDERSIGNED he executed the Declaration for the	reby auth above-re	orize(s) ASSIGNEE to i	nsert in this instru on.	ment the date(s) on w	hich UNDERSIGNED
IN WITNESS WHEREOF, this				ED on the date opposi	ite UNDERSIGNED's
Date JANUARY 14, 2013	Inventor_	Roby Bearden, JR.	(LS)	Witness Talrica	i D. Vine
Date	Inventor_	James Ronald Bielenberg	(LS)	Witness	
Date	Inventor_	Howard Freund	(LS)	Witness	
Date	Inventor_	Chris Aaron Wright	(LS)	Witness	

PATENT Witness REEL: 029914 FRAME: 0585

Witness

(LS)

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann **Douglas Wayne Hissong Howard Freund Brandon Thomas Stone**

Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright

Inventor_

Inventor

Date_

Michael Francis. Raterman

James Ronald Rigby

Jonathan Martin McConnachie Roby Bearden, Jr. Michael Franics Raterman

Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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1) UNDERSIGNED hereby assign(a) to Ex

and Engineering Company), a collectively as ASSIGNEE, the UNDERSIGNED's invention or patent application entitled	corporation of e entire right	of Delaware, its succ title and interest.	essors, legal rep for the United S	resentatives and as	iom countries in and to
ALKALI METAL HYD	PROPROCES	SSING OF HEAVY	OILS WITH EN	NHANCED REMO	OVAL OF COKE
said application having been exe further identified as Case Numbe	(Cuted on the	12,17,19,20 6,14,21	day(s) of	Secember January Ebruary	2012 2013 2013, and being under provisions of
international conventions or treat	ties.	, and an rights o	or priority created	by said application	under provisions of
2) UNDERSIGNED agreerelating to obtaining patents and applications or substitutes therefor recording in the United Stanecessary or expedient.	a tne prosecu ore or registra	ition thereof for said ations thereof, and an	invention or im v specific senara	provement, and an	ny of the above required
 UNDERSIGNED agree patent issued thereon, or any a proceedings, UNDERSIGNED v preparing and executing all documents. 	reissue or ap vill cooperate	plication for the rej with ASSIGNEE to	ssue thereof, be the best of the a	coming involved :	in priority of invention
4) UNDERSIGNED agree and foreign patents covering said fully and as entirely as the same been made.	a invention of	r improvement and fo	n vest all rights t	herein hereby conv	round to ASSIGNIED an
5) UNDERSIGNED here executed the Declaration for the a	eby authorize(above-reference	(s) ASSIGNEE to ins ced patent application	ert in this instrun	nent the date(s) on	which UNDERSIGNED
IN WITNESS WHEREOF, this NAME.	assignment h	as been executed by	UNDERSIGNEI	O on the date oppo	osite UNDERSIGNED's
Date	InventorRoby	Bearden, JR	(LS)	Witness	
Date 14/7/2012	Inventor James	s Ronald Bielenberg	(LS)	Witness Bey	in War
Date	Inventor Howa	urd Freund	(LS)	Witness	
Date	InventorChris	Aaron Wright	(LS)	Witness	

(LS)

PATENT REEL: 029914 FRAME: 0586

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone

Date_

Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright Jonathan Martin McConnachie Roby Bearden, Jr. Michael Franics Raterman Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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	n or improvement and to all patent appli			
	executed on the; and all rights of treaties.			
relating to obtaining patents applications or substitutes the	agree(s) upon the request of ASSIGNEs and the prosecution thereof for said interefore or registrations thereof, and any States Patent and Trademark Office a	nvention or im specific separat	provement, and an e assignments of a	y continuations of such ny of the above required
patent issued thereon, or a proceedings, UNDERSIGNI	agree(s) that in the event of any application reissue or application for the reissED will cooperate with ASSIGNEE to the documents and giving and producing evidence.	sue thereof, be he best of the a	coming involved i bility of UNDERS	n priority of invention
and foreign patents covering	agree(s) to perform upon ASSIGNEE's a said invention or improvement and to same would have been held and enjoyed	vest all rights t	herein hereby conv	eyed to ASSIGNEE, as
	hereby authorize(s) ASSIGNEE to inser the above-referenced patent application.		nent the date(s) on	which UNDERSIGNED
IN WITNESS WHEREOF, NAME.	this assignment has been executed by l	UNDERSIGNE	D on the date oppo	osite UNDERSIGNED's
Date	InventorRoby Bearden, JR.	(LS)	Witness	
Date	Inventor	(LS)	Witness	
Date Dec 19, 202	Inventor Howard Freund	(LS)	Witness:	2M Marsha
Date	InventorChris Aaron Wright	(LS)	Witness	
Date	Inventor	(LS)	Witness	

Michael Francis. Raterman

James Ronald Rigby

Inventor_

REEL: 029914 FRAME: 0587

(LS)

<u>ASS</u>IGNMENT INVENTOR or INVENTORS:

Walter David Vann **Douglas Wayne Hissong** Howard Freund **Brandon Thomas Stone**

Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright Jonathan Martin McConnachie Roby Bearden, Jr. Michael Franics Raterman

Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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ALKALI METAL HYDROPROCESSING OF HEAVY OILS WITH ENHANCED REMOVAL OF COKE **PRODUCTS**

	1	12/4/7/19/21		ecember Inuan	2012
said application having been further identified as Case Nu international conventions or t	mber		day(s) of ℓ		2013 2013, and being oder provisions of
2) UNDERSIGNED relating to obtaining patents applications or substitutes the for recording in the United necessary or expedient.	and the prosecu prefore or registra	ition thereof for said ations thereof, and an	invention or imp v specific separate	provement, and any assignments of any	continuations of such
3) UNDERSIGNED a patent issued thereon, or an proceedings, UNDERSIGNE preparing and executing all de-	ny reissue or ap D will cooperate	oplication for the reinstruction for the reinstruction for the reinstruction of the reinstruc	ssue thereof, bec	oming involved in oility of UNDERSIG	priority of invention
4) UNDERSIGNED a and foreign patents covering fully and as entirely as the sa been made.	agree(s) to perform said invention or	m upon ASSIGNEE's r improvement and to	s request any and o vest all rights th	all affirmative acts to	ed to ASSIGNEE as
5) UNDERSIGNED executed the Declaration for t	hereby authorize(he above-referenc	(s) ASSIGNEE to insect of the contraction (s)	ert in this instrum	ent the date(s) on wh	ich UNDERSIGNED
IN WITNESS WHEREOF, t NAME.	his assignment h	as been executed by	UNDERSIGNED	on the date opposit	e UNDERSIGNED's
Date	InventorRoby	Bearden, JR.	(LS)	Witness	
Date	InventorJames	s Ronald Bielenberg	(LS)	Witness	
Date	Inventor	ard Freund	(LS)	Witness	
Date 12/17/12	Inventor Chris	Aaron Wright	(LS)	Witness Talera	: OSin-
Date 1/21/2013	InventorMicha	Claudi F. Ka acl Francis. Raterman	Com (S)	Witness Bole N	Marshall
Date	Inventor	s Ronald Rigby	(LS)	Witness	ENT FRAME: 0588

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright Jonathan Martin McConnachie Roby Bearden, Jr. Michael Franics Raterman Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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UNDERSIGNED's invention patent application entitled	or improvemen	it and to all patent a	pplications and pate	nts covering same	which is described in a
said application having been of further identified as Case Nur international conventions or t	executed on the	SSING OF HEAVY PRODU 7, 17, 19 6, 14, 21 2, and all rights	Y OILS WITH END JCTS JCTS JCTS JCTS JCTS JCTS JCTS JCTS	HANCED REMOVED AND ANGEL PROPERTY OF THE PROPE	VAL OF COKE 2012. 2013 2013, and being under provisions of
relating to obtaining patents applications or substitutes the for recording in the United necessary or expedient.	and the prosec- erefore or registr States Patent an	ution thereof for sa rations thereof, and a nd Trademark Office	id invention or imp any specific separate ce and any foreign	provement, and any e assignments of an patent office that	ASSIGNEE may deem
3) UNDERSIGNED a patent issued thereon, or a proceedings, UNDERSIGNE preparing and executing all d	ny reissue or a D will cooperat	pplication for the e with ASSIGNEE	reissue thereof, becaute the best of the al	coming involved in collity of UNDERSI	tion or improvement, or n priority of invention GNED in the matter of
4) UNDERSIGNED a and foreign patents covering fully and as entirely as the s been made.	said invention	or improvement and	d to vest all rights th	nerein hereby conv	to obtain United States eyed to ASSIGNEE, as imment and sale had not
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IN WITNESS WHEREOF, NAME.	this assignment	has been executed	by UNDERSIGNED	on the date oppo	site UNDERSIGNED's
Date	InventorRo	by Bearden, JR.	(LS)	Witness	
Date	InventorJar	nes Ronald Bielenberg	(LS)	Witness	
Date	InventorHo	oward Freund	(LS)	Witness	
Date	InventorCh	nris Aaron Wright	(LS)	Witness	
Date	Inventor	ichael Francis. Raterman	(LS)	Witness	
Date Jan, 6, 2013	Inventor 1	n Royald Right	(1.5)	Witness Hon	paya

Family Number: 2011EM385-US2

PATENT

REEL: 029914 FRAME: 0589

USSN __

13/693222

Filed: December 4, 2012

ASSIGNMENT INVENTOR or INVENTORS:

Walter David Vann Douglas Wayne Hissong Howard Freund Brandon Thomas Stone Daniel Paul Leta William C. Baird, Jr. Chris Aaron Wright Jonathan Martin McConnachie Roby Bearden, Jr. Michael Francis Raterman Richard Alan Demmin James Ronald Bielenberg James Ronald Rigby

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patent application entitled				•		
ALKALI METAL HYD	ROPROCI	ESSING OF HEAVY O	ILS WITH ENF	HANCED REN	MOVAL OF COKE	
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said application having been exe further identified as Case Numbe international conventions or treat	er	; and all rights of	_ day(s) of rel	brian	2013, and being ion under provisions of	
2) UNDERSIGNED agr relating to obtaining patents an applications or substitutes theref for recording in the United Sta necessary or expedient.	d the prosections or defined the design of t	cution thereof for said rations thereof, and any	invention or imp specific separate	rovement, and assignments of	of any of the above required	
3) UNDERSIGNED agree patent issued thereon, or any proceedings, UNDERSIGNED operaring and executing all documents.	reissue or a will coopera	application for the reis te with ASSIGNEE to t	sue thereof, beca he best of the ab	oming involve ility of UNDE		
4) UNDERSIGNED agree and foreign patents covering saifully and as entirely as the same been made.	d invention	or improvement and to	vest all rights th	erein hereby c		
5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.						
IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED'S NAME.						
Date 6-Jan-2013	InventorQ Br	nandon T. Atone andon Thomas Stone	(LS)	Witness	Meller	
Date	Inventor		(LS)	Witness		
Date	Inventor		(LS)	Witness		
Date	Inventor		(LS)	Witness		
Date	Inventor		(LS)	Witness		

RECORDED: 03/04/2013

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