### 503533451 10/21/2015 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3580077

UBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
ALAIN DUNET			09/17/2015	
ISABELLE PREVOST			09/17/2015	
THIERRY LEFLOUR			09/17/2015	
RECEIVING PARTY D	ΑΤΑ			
Name:	AXENS			
Street Address:	89 BD F	RANKLIN ROOSEVELT, B.P. 50802		
City:	RUEIL	MALMAISON CEDEX		
State/Country:	FRANC	E		
Postal Code:	92508			
		Number		
PROPERTY NUMBER		Number		
		<b>Number</b> 14646434		
Property Type Application Number:				
Property Type Application Number: CORRESPONDENCE	DATA	14646434		
Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will I	DATA (be sent to	14646434 (703)243-6410 • <b>the e-mail address first; if that is unsu</b>		
Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will I	DATA ( be sent to provided	(703)243-6410		
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email:	DATA be sent to provided	14646434 (703)243-6410 the e-mail address first; if that is unsu ; if that is unsuccessful, it will be sent		
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name:	DATA be sent to provided	14646434 (703)243-6410 <b><i>the e-mail address first; if that is unsu</i></b> <i>; if that is unsuccessful, it will be sent</i> 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	DATA be sent to provided	(703)243-6410 <i>the e-mail address first; if that is unsu</i> <i>; if that is unsuccessful, it will be sent</i> 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD.	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will L using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	DATA be sent to provided	14646434 (703)243-6410 <b>the e-mail address first; if that is unsu</b> <b>; if that is unsuccessful, it will be sent</b> 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD. SUITE 1400	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	DATA be sent to provided	(703)243-6410 <i>the e-mail address first; if that is unsu</i> <i>; if that is unsuccessful, it will be sent</i> 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VIRGINIA 22201	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will I using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	DATA be sent to provided	(703)243-6410 (703)243-6410 (703)243-6410 (703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VIRGINIA 22201 PET-3019	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will L using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 1: Address Line 2: Address Line 2: Address Line 4: TTORNEY DOCKET N IAME OF SUBMITTER:	DATA be sent to provided	14646434 (703)243-6410 <b>the e-mail address first; if that is unsu</b> <b>if that is unsuccessful, it will be sent</b> 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VIRGINIA 22201 PET-3019 ELIZABETH JERMAN	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will k using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 1: Address Line 2: Address Line 2: Address Line 4: TTORNEY DOCKET N IAME OF SUBMITTER:	DATA be sent to provided	(703)243-6410 the e-mail address first; if that is unsull; if that is unsuccessful, it will be sent 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VIRGINIA 22201 PET-3019 ELIZABETH JERMAN /Elizabeth Jerman/	via US Mail.	
Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will L using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 1: Address Line 2: Address Line 2: Address Line 4: TTORNEY DOCKET N IAME OF SUBMITTER:	DATA be sent to provided	14646434 (703)243-6410 <b>the e-mail address first; if that is unsu</b> <b>if that is unsuccessful, it will be sent</b> 703-243-6333 mail@mwzb.com MILLEN, WHITE, ZELANO & BRANIGAN 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VIRGINIA 22201 PET-3019 ELIZABETH JERMAN	<i>via US Mail.</i> -EJ	

source=DualDecandAssign\_3inv#page2.tif

PATENT REEL: 036847 FRAME: 0590

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	METHOD FOR RECOVERING LOW-TEMPERATURE HEAT AND APPLICATION OF THE METHOD TO AN AROMATICS COMPLEX
As the below nam	ed inventor, I hereby declare that:
This declaration	The attached application, or
is directed to:	United States Application or PCT International Application number <u>14/646.434</u> filed on <u>May 21</u> , 2015
The above-identif	fied application was made or authorized to be made by me.
I believe that I are	the original inventor or an original joint inventor of a claimed invention in the application.
all patent(s) listed	AXENS 89 Bd Franklin Roosevelt, B.P. 50802 92508 Rueil Malmaison Cedex, France ed to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, t all renewals, reissues, reexaminations and extensions thereof.
ASSIGNOR here right, title and int and all Letters Pa thereof, and in an to accrue with res invention, SAID including any and which may be gra right to sue for da arising from or al renewals, reissue representatives, fit	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, by assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive erest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any tent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions do any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or spect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, i all earlier priority rights (U.S. and foreign),divisions and continuations thereof, any and all Letters Patent anted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, including the amages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise opertaining thereto, for and during the term or terms of any and all such Letters Patent, including any and all s, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal n as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and s, if the assignment had not been made.
and foreign count	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States tries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to r papers that may be needed in connection with securing Letters Patents thereon.
AND A any and all divisi	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on ions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.
The un assignment inform property record th	dersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this mation which may be necessary or desirable in order for the United States Patent and Trademark Office to his document.
	IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR
I hereb fine or imprisonr	y acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by nent of not more than five (5) years, or both.
LEGAL NAME Inventor:	OF INVENTOR Alain DUNET, Date: <u>17/09/2015</u>
L	Millen, White, Zelano & Branigan, P.C. Attorneys at Law Arlington Courthouse Plaza 2200 Clarendon Boulevaro   Suite 1400   Arlington VA 22201

TELEPHONE: 703.243.6333 | PAX: 703.243.6410 Email: mail@mwzb.com

Effective, September 16, 2012

PATENT REEL: 036847 FRAME: 0591

### DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	METHOD FOR RECOVERING LOW-TEMPERATURE HEAT AND APPLICATION OF THE METHOD TO AN AROMATICS COMPLEX
As the below nan	hed inventor, I hereby declare that:
This declaration	The attached application, or
is directed to:	United States Application or PCT International Application number <u>14/646.434</u> filed on <u>May 21.</u> 2015
The above-identii	fied application was made or authorized to be made by me.
I believe that I an	a the original inventor or an original joint inventor of a claimed invention in the application.
all patent(s) listed	AXENS 89 Bd Franklin Roosevelt, B.P. 50802 92508 Rueil Malmaison Cedex, France ed to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and d above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, d all renewals, reissues, reexaminations and extensions thereof.
ASSIGNOR here right, title and int and all Letters Pa thereof, and in an to accrue with res invention, SAID including any and which may be gra- right to sue for da arising from or ap renewals, reissue representatives, in	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, by assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive terest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any tent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions and et any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or spect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, di all earlier priority rights (U.S. and foreign),divisions and continuations thereof, any and all Letters Patent anted therefor, including any and all renewals, refesues, reexaminations and extensions thereof, including the amages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise ppertaining thereto, for and during the term or terms of any and all such Letters Patent, including any and all s, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal n as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have heid and e, if the assignment had not been made.
and foreign coun	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States tries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to r papers that may be needed in connection with securing Letters Patents thereon.
	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on ions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.
	dersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this mation which may be necessary or desirable in order for the United States Patent and Trademark Office to his document.
	IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR
	y acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by nent of not more than five (5) years, or both.
LEGAL NAME	OF INVENTOR Isabelie PREVOST Date: 12 July 2015
Signature:	
	MRLEN, WHITE, ZELANO & BRANIGAN, P.C. Attorneys at Law Arlington Courthouse Plaza 2200 Clarendon Boolevard   Suite 1400   Arlington VA 22201

Telephone: 703.243.6333 [ Fax: 703.243.6410 Email: mail@mwzb.com

Effective, September 16, 2012

PATENT REEL: 036847 FRAME: 0592

## DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

Title of Invention	METHOD FOR RECOVERING LOW-TEMPERATURE HEAT AND APPLICATION OF THE METHOD TO AN AROMATICS COMPLEX
As the below not	imed inventor, I hereby declare that:
This declaration	n The attached application, or
is directed to:	United States Application or PCT International Application number <u>14/646.434</u> filed on <u>May 21</u> , 2015
The above-identi	ified application was made or authorized to be made by me.
believe that I as	m the original inventor or an original joint inventor of a claimed invention in the application.
AND WHEREA	
	AXENS 89 Bd Franklin Roosevelt, B.P. 50802
	92508 Rueil Malmäison Cedex, France
all patent(s) liste	red to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and ad above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, ad all renewals, refissues, reexaminations and extensions thereof.
ASSIGNOR here right, title and in and all Letters P- thereof, and in a to accrue with re invention, SAID including any an which may be gr right to sue for d arising from or a renewals, reissue representatives,	WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, eby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive iterest in and to said invention and patent(s), including any and all divisions and continuations thereof, and any atent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions and to any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or espect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said o ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and patent, and all earlier priority rights (U.S. and foreign),divisions and continuations thereoi, any and all Letters Patent ranted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, including the lamages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise appertaining thereto, for and during the term or terms of any and all such Letters Patent, including any and all es, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and e, if the assignment had not been made.
and foreign cour	ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States intries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to er papers that may be needed in connection with securing Letters Patents thereon.
AND . any and all divis	ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on sions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.
The us assignment infor properly record	ndersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this rmation which may be necessary or desirable in order for the United States Patent and Trademark Office to this document.
	IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR
I herel fine or imprison	by acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by iment of not more than five (5) years, or both.
LEGAL NAME	OF INVENTOR
Inventor	Thierry LEFLOUR Date: 17 sept. 2015
	Colleges
Signature:	

Arlington Courthouse Plaza 2200 Clarendon Boulevard | Suite 1400 | Arlington VA 22201 Telephone: 703.243.6333 | Fax: 703.243.6410 Email: Mail@mwzb.com

Effective, September 16, 2012

### PATENT REEL: 036847 FRAME: 0593

### RECORDED: 10/21/2015