TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM406768

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
LANZATECH NEW ZEALAND LIMITED		11/14/2016	Limited Liability Company:
LANZATECH, INC.		11/14/2016	Corporation:
LANZATECH FREEDOM PINES BIOREFINERY LLC		11/14/2016	Limited Liability Company:
LANZATECH HONG KONG LIMITED		11/14/2016	Limited Liability Company:
LANZATECH PRIVATE LIMITED		11/14/2016	Limited Liability Company:
LANZATECH UK LIMITED		11/14/2016	Limited Liability Company:

RECEIVING PARTY DATA

Name:	Venture Lending & Leasing VII, Inc.
Street Address:	104 La Mesa Drive, Suite 102
City:	Portola Valley
State/Country:	CALIFORNIA
Postal Code:	94028
Entity Type:	CORPORATION: MARYLAND
Name:	Venture Lending & Leasing VIII, Inc.
Street Address:	104 La Mesa Drive, Suite 102
City:	Portola Valley
State/Country:	CALIFORNIA
Postal Code:	94028
Entity Type:	CORPORATION: MARYLAND

OP $340.00 4107710

PROPERTY NUMBERS Total: 13

Property Type	Number	Word Mark
Registration Number:	4107710	LANZATECH
Registration Number:	4107711	LANZATECH
Registration Number:	4107712	
Registration Number:	4222152	LANZATECH
Registration Number:	4222154	LANZATECH
Registration Number:	4964787	FREEDOM PINES

Property Type	Number	Word Mark
Registration Number:	4968988	FREEDOM PINES BIOREFINERY
Registration Number:	4968989	
Registration Number:	4222155	LANZATECH
Registration Number:	4222153	LANZATECH
Serial Number:	85724538	CAPTURING CARBON. FUELING GROWTH.
Serial Number:	86407706	LANZATECH GTS GAS TESTING STATION
Serial Number:	86407698	GTS GAS TESTING STATION

CORRESPONDENCE DATA

Fax Number: 4157774961

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 415 981 1400
Email: NSust@greeneradovsky.com
Correspondent Name: JEFFREY T. KLUGMAN
Address Line 1: FOUR EMBARCADERO CENTER, SUITE 4000
Address Line 4: SAN FRANCISCO, CALIFORNIA 94111

NAME OF SUBMITTER:	JEFFREY T. KLUGMAN
SIGNATURE:	/JEFFREY T. KLUGMAN/
DATE SIGNED:	11/28/2016

Total Attachments: 50
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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (this "Agreement") is made as of November 14, 2016, by and among LANZATECH NEW ZEALAND LIMITED, LANZATECH, INC., LANZATECH FREEDOM PINES BIOREFINERY LLC, LANZATECH HONG KONG LIMITED, LANZATECH PRIVATE LIMITED and LANZATECH UK LIMITED (each a "Grantor" and together "Grantors"), and VENTURE LENDING & LEASING VII, INC. ("VLL7") and VENTURE LENDING & LEASING VIII, INC. ("VLL8"), both Maryland corporations (sometimes referred to herein individually or together as "Secured Party").

RECITALS

A. Pursuant to that certain Loan and Security Agreement of even date herewith among Grantors, as co-borrowers, and Secured Party, as lender (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement"), Secured Party has agreed to make certain advances of money and to extend certain financial accommodations to Grantors (the "Loans") in the amounts and manner set forth in the Loan Agreement. All capitalized terms used herein without definition shall have the meanings ascribed to them in the Loan Agreement.

B. Secured Party is willing to make the Loans to Grantors, but only upon the condition, among others, that each Grantor shall grant to Secured Party a security interest in substantially all of such Grantor's personal property whether presently existing or hereafter acquired. To that end, Grantors have executed in favor of Secured Party the Loan Agreement granting a security interest in all Collateral, and are executing this Agreement with respect to certain items of Intellectual Property, in particular.

NOW, THEREFORE, THE PARTIES HERETO AGREE AS FOLLOWS:

1. Grant of Security Interest. As collateral security for the prompt and complete payment and performance of all of Grantors' present or future Obligations, each Grantor hereby grants a security interest and mortgage to Secured Party, as security, in and to such Grantor's entire right, title and interest in, to and under the following Intellectual Property, now owned or hereafter acquired by such Grantor or in which such Grantor now holds or hereafter acquires any interest (all of which shall collectively be called the "Collateral" for purposes of this Agreement):

(a) Any and all copyrights, whether registered or unregistered, held pursuant to the laws of the United States, any State thereof or of any other country; all registrations, applications and recordings in the United States Copyright Office or in any similar office or agency of the United States, any State thereof or any other country; all continuations, renewals, or extensions thereof, and any registrations to be issued under any pending applications, including without limitation those set forth on Exhibit A attached hereto (collectively, the "Copyrights");

(b) All letters patent of, or rights corresponding thereto in, the United States or any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto in the United States or any other country, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country; all reissues, continuations, continuations-in-part or extensions thereof; all petty patents, divisionals, and patents of addition; and all patents to be issued under any such applications, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");

(c) All trademarks, trade names, corporate names, business names, trade styles, service marks, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or

appear, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and any applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof, and reissues, extensions or renewals thereof, and the entire goodwill of the business of such Grantor connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(d) Any and all claims for damages by way of past, present and future infringement of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

(e) All licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(f) All amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents; and

(g) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

Notwithstanding the foregoing the term "Collateral" shall not include: (a) "intent-to-use" trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise, but only to the extent the granting of a security interest in such "intent-to-use" trademarks would be contrary to applicable law or (b) any contract, instrument or chattel paper in which a Grantor has any right, title or interest if and to the extent such contract, instrument or chattel paper includes a provision containing a restriction on assignment such that the creation of a security interest in the right, title or interest of such Grantor therein would be prohibited and would, in and of itself, cause or result in a default thereunder enabling another person party to such contract, instrument or chattel paper to enforce any remedy with respect thereto; provided, however, that the foregoing exclusion shall not apply if (i) such prohibition has been waived or such other person has otherwise consented to the creation hereunder of a security interest in such contract, instrument or chattel paper, or (ii) such prohibition would be rendered ineffective pursuant to Sections 9-407(a) or 9-408(a) of the UCC, as applicable and as then in effect in any relevant jurisdiction, or any other applicable law (including the Bankruptcy Code or principles of equity); provided further that immediately upon the ineffectiveness, lapse or termination of any such provision, the term "Collateral" shall include, and such Grantor shall be deemed to have granted a security interest in, all its rights, title and interests in and to such contract, instrument or chattel paper as if such provision had never been in effect; and provided further that the foregoing exclusion shall in no way be construed so as to limit, impair or otherwise affect Secured Party's unconditional continuing security interest in and to all rights, title and interests of such Grantor in or to any payment obligations or other rights to receive monies due or to become due under any such contract, instrument or chattel paper and in any such monies and other proceeds of such contract, instrument or chattel paper.

2. Covenants and Warranties. Each Grantor represents, warrants, covenants and agrees as follows:

(a) Such Grantor has rights (as defined in the UCC) in the Collateral, except for Permitted Liens;

(b) During the term of this Agreement, such Grantor will not transfer or otherwise encumber any interest in the Collateral, except for Permitted Liens and except for transfers otherwise permitted under the Loan Agreement;

(c) **Grantors shall deliver to Secured Party within thirty (30) days of the last day of each fiscal quarter, a report signed by Grantors, in form reasonably acceptable to Secured Party, listing (i) any applications or registrations that either Grantor has made or filed in respect of any patents, copyrights or trademarks, (ii) the status of any outstanding applications or registrations and (iii) any material change in the composition of the Collateral;**

(d) Each Grantor shall use reasonable commercial efforts to (i) protect, defend and maintain the validity and enforceability of the Trademarks, Patents and Copyrights material to the business of Grantors (ii) detect infringements of the Trademarks, Patents and Copyrights material to the business of Grantors and promptly advise Secured Party in writing of material infringements of such intellectual property rights detected and (iii) not allow any Trademarks, Patents or Copyrights material to the business of Grantors to be abandoned, forfeited or dedicated to the public unless such Grantor deems it to be in the best interest of such Grantor's business;

(e) Each Grantor shall, from time to time, execute and file such other instruments, and take such further actions as Secured Party may reasonably request from time to time to perfect or continue the perfection of Secured Party's interest in the Collateral. Each Grantor shall give Secured Party notice of all such applications or registrations; and

(f) Each Grantor shall not enter into any agreement that would materially impair or conflict with such Grantor's obligations hereunder without Secured Party's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Each Grantor shall not permit the inclusion in any material contract to which it becomes a party of any provisions that could or might in any way prevent the creation of a security interest in such Grantor's rights and interests in any property included within the definition of the Collateral acquired under such contracts, except for provisions in such material contracts as are referenced in the last paragraph of Section 1 of this Agreement.

3. Further Assurances; Attorney in Fact.

(a) On a continuing basis, Grantors will make, execute, acknowledge and deliver, and file and record in the proper filing and recording places in the United States, all such instruments, including appropriate financing and continuation statements and collateral agreements and filings with the United States Patent and Trademark Office and the Register of Copyrights, and take all such action as may reasonably be deemed necessary or advisable, or as reasonably requested by Secured Party, to perfect Secured Party's security interest in all Copyrights, Patents and Trademarks and otherwise to carry out the intent and purposes of this Agreement, or for assuring and confirming to Secured Party the grant or perfection of a security interest in all Collateral.

(b) Each Grantor hereby irrevocably appoints Secured Party as such Grantor's attorney-in-fact, with full authority in the place and stead of such Grantor and in the name of such Grantor, from time to time in Secured Party's discretion, to take any action and to execute any instrument which Secured Party may deem necessary or advisable to accomplish the purposes of this Agreement, including (i) to modify, in its sole discretion, this Agreement without first obtaining such Grantor's approval of or signature to such modification by amending Exhibits A, B and C, hereof, as appropriate, to include reference to any right, title or interest in any Copyrights, Patents or Trademarks acquired by a Grantor after the execution hereof or to delete any reference to any right, title or interest in any Copyrights, Patents or Trademarks in which such Grantor no longer has or claims any right, title or interest, (ii) to file, in its sole discretion, one or more financing or continuation statements and amendments thereto, relative to any of the Collateral without the signature of such Grantor where permitted by law, and (iii) subject to the Forbearance Period, during the continuance of an Event of Default, to transfer the Collateral into the name of Secured Party or a third party to the extent permitted under the California Uniform Commercial Code.

4. Events of Default. The occurrence of any of the following shall constitute an Event of Default under this Agreement:

(a) An Event of Default under the Loan Agreement; or

(b) Grantors' material breach of any warranty or material agreement made by Grantors in this Agreement and, as to any breach that is capable of cure, Grantors' failure to cure such breach within thirty (30) days of the sooner to occur of Grantors' receipt of notice of such breach from Secured Party or the date on which such breach first becomes known to Grantors.

5. Condition to Exercise of Rights. Exercise of any rights under this Agreement will be subject to and conditioned upon (and each party shall use its best efforts to ensure) compliance with applicable laws (acknowledging that LanzaTech New Zealand Limited is incorporated in New Zealand and subject to New Zealand law).

6. Amendments. This Agreement may be amended only by a written instrument signed by both parties hereto, except for amendments permitted under Section 3 hereof to be made by Secured Party alone.

7. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

8. Several Nature of Secured Party's Obligations and Rights; Pari Passu Security Interests. This Agreement is and shall be interpreted for all purposes as separate and distinct agreements between Grantors and VLL7, on the one hand, and Grantors and VLL8, on the other hand, and nothing in this Agreement shall be deemed a joint venture, partnership or other association between VLL7 and VLL8. Each reference in this Agreement to "Secured Party" shall mean and refer to each of VLL7 and VLL8, singly and independent of one another. Without limiting the generality of the foregoing, the covenants and other obligations of "Secured Party" under this Agreement are several and not joint obligations of VLL7 and VLL8, and all rights and remedies of "Secured Party" under this Agreement may be exercised by VLL7 and/or VLL8 independently of one another. The security interests granted by Grantor to each of VLL7 and VLL8 hereunder and under the Loan Agreement shall be deemed to have been granted and perfected at the same time and shall be of equal priority.

[Signature Pages Follow]

[Signature Page to Intellectual Property Security Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and year first above written.

GRANTOR:

LANZATECH NEW ZEALAND LIMITED

By: _____
Name: _____
Title: Director

By: _____
Name: _____
Title: Director

Address of Grantor:

_____
_____
Attn: Chief Executive Officer

GRANTOR:

LANZATECH, INC.

By: _____
Name: _____
Title: _____

Address of Grantor:

_____
_____
Attn: Chief Executive Officer

GRANTOR:

LANZATECH FREEDOM PINES BIOREFINERY LLC

By: _____
Name: _____
Title: _____

Address of Grantor:

_____
_____
Attn: Chief Executive Officer

GRANTOR:

LANZATECH HONG KONG LIMITED

By: _____
Name: _____
Title: _____

Address of Grantor:

_____
_____
Attn: Chief Executive Officer

GRANTOR:

Address of Grantor:

Attn: Chief Executive Officer

LANZATECH PRIVATE LIMITED

By:
Name:
Title:

GRANTOR:

Address of Grantor:

Attn: Chief Executive Officer

LANZATECH UK LIMITED

By:
Name:
Title:

SECURED PARTY:

Address of Secured Party:

104 La Mesa Dr., Suite 102
Portola Valley, CA 94028
Attn: Chief Financial Officer

VENTURE LENDING & LEASING VII, INC.

By:
Name:
Title:

SECURED PARTY:

Address of Secured Party:

104 La Mesa Dr., Suite 102
Portola Valley, CA 94028
Attn: Chief Financial Officer

VENTURE LENDING & LEASING VIII, INC.

By:
Name:
Title:

GRANTOR:

Address of Grantor:

LANZATECH PRIVATE LIMITED

_____

By:_____
Name:_____
Title:_____

Attn: Chief Executive Officer

GRANTOR:

Address of Grantor:

LANZATECH UK LIMITED

_____

By:_____
Name:_____
Title:_____

Attn: Chief Executive Officer

SECURED PARTY:

Address of Secured Party:

VENTURE LENDING & LEASING VII, INC.

104 La Mesa Dr., Suite 102
Portola Valley, CA 94028
Attn: Chief Financial Officer

By:_____
Name: David Wanek
Title: Vice President

SECURED PARTY:

Address of Secured Party:

VENTURE LENDING & LEASING VIII, INC.

104 La Mesa Dr., Suite 102
Portola Valley, CA 94028
Attn: Chief Financial Officer

By:_____
Name: David Wanek
Title: Vice President

EXHIBIT A

Copyrights

Description	Registration Number	Registration Date
N/A		

EXHIBIT B

Patents

LT	Country	Subject Matter	Status	Application	Patent
LT001	NZ	Microbial fermentation of gaseous substrates to produce alcohols	Granted	546496	546496
LT001	US	Microbial fermentation of gaseous substrates to produce alcohols	Granted	12/296300	7972824
LT003	NZ	Alcohol production process	Granted	553984	553984
LT003	US	Alcohol production process	Granted	12/529761	8293509
LT004	CN	Alcohol production process	Granted	200880111599.9	ZL200880111599.9
LT004	IN	Alcohol production process	Pending	698/DELNP/2010	
LT004	NZ	Alcohol production process	Granted	583586	583586
LT008	AU	Carbon capture in fermentation	Granted	2008319515	2008319515
LT008	BR	Carbon capture in fermentation	Granted	PI0818458-5	PI 0818458-5
LT008	EP	Carbon capture in fermentation	Natl Valid	08843491.5	2212426
LT008	HK	Carbon capture in fermentation	Granted	10109083.7	11426338
LT008	IN	Carbon capture in fermentation	Pending	2712/DELNP/2010	
LT008	JP	Carbon capture in fermentation	Granted	2010-531980	5296797
LT008	KR	Carbon capture in fermentation	Granted	10-2010-7011884	1423365
LT008	NZ	Carbon capture in fermentation	Granted	560757	560757
LT008	RU	Carbon capture in fermentation	Granted	2010121637	2539027
LT008	US	Carbon capture in fermentation	Granted	12/739424	8376736
LT008	US	Carbon capture in fermentation	Granted	12/821468	8507228
LT008	US	Carbon capture in fermentation	Granted	13/587444	8383376
LT008	NZ	Carbon capture in fermentation	Granted	601625	601625
LT008	EP	Carbon capture in fermentation	Published	13171547.6	
LT008	CN	Carbon capture in fermentation	Published	201310222798	
LT008	US	Carbon capture in fermentation	Granted	13/952651	9127296
LT008	EP	Carbon capture in fermentation	Published	13177839.1	
LT008	KR	Carbon capture in fermentation	Granted	10-2013-7021029	1445995
LT008	AU	Carbon capture in fermentation	Granted	2013263735	2013263735
LT008	KR	Carbon capture in fermentation	Allowed	10-2014-7004073	1622855
LT008	CN	Carbon capture in fermentation	Published	201410048962.4	
LT008	RU	Carbon capture in fermentation	Pending	2014145306	
LT008	EP	Carbon capture in fermentation	Published	15180627.0	

LT	Country	Subject Matter	Status	Application	Patent
LT008	CN	Carbon capture in fermentation	Published	201510493655.1	
LT008	CN	Carbon capture in fermentation	Published	201510493591.5	
LT008	US	Carbon capture in fermentation	Published	14/829597	
LT008	CN	Carbon capture in fermentation	Published	201510493677.8	
LT008	AT	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	BE	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	CH	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	CZ	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	DE	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	ES	Carbon capture in fermentation	Granted	08843491.5	2550278
LT008	FI	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	FR	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	GB	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	NL	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	NO	Carbon capture in fermentation	Granted	08843491.5	2212426
LT008	SE	Carbon capture in fermentation	Granted	08843491.5	2212426
LT014	AU	Novel bacteria and methods of use thereof	Granted	2008321615	2008321615
LT014	BR	Novel bacteria and methods of use thereof	Granted	PI0820556-6	PI0820556-6
LT014	CA	Novel bacteria and methods of use thereof	Granted	2703622	2703622
LT014	CN	Novel bacteria and methods of use thereof	Granted	200880124482.4	200880124482.4
LT014	EA	Novel bacteria and methods of use thereof	Granted	201070608	0022710
LT014	EP	Novel bacteria and methods of use thereof	Natl Valid	08849635.1	2217696
LT014	HK	Novel bacteria and methods of use thereof	Granted	10111856.8	11454068
LT014	IN	Novel bacteria and methods of use thereof	Pending	3008/DELNP/2010	
LT014	JP	Novel bacteria and methods of use thereof	Granted	2010-533986	5600296
LT014	KR	Novel bacteria and methods of use thereof	Granted	10-2010-7013119	1375029
LT014	NZ	Novel bacteria and methods of use thereof	Granted	584652	584652
LT014	US	Novel bacteria and methods of use thereof	Granted	12/742149	8222013
LT014	US	Novel bacteria and methods of use thereof	Granted	13/537798	8852918
LT014	GB	Novel bacteria and methods of use thereof	Granted	08849635.1	2217696
LT014	BE	Novel bacteria and methods of use thereof	Granted	08849635.1	2217696
LT014	DE	Novel bacteria and methods of use thereof	Granted	08849635.1	2217696
LT014	NL	Novel bacteria and methods of use thereof	Granted	08849635.1	2217696
LT014	RU	Novel bacteria and methods of use thereof	Granted	201070608	0022710
LT014	KZ	Novel bacteria and methods of use thereof	Granted	201070608	0022710

LT	Country	Subject Matter	Status	Application	Patent
LT018	AU	Microbial alcohol production process	Granted	2009224112	2009224112
LT018	BR	Microbial alcohol production process	Pending	PI0909334-6	
LT018	CA	Microbial alcohol production process	Granted	2718219	2718219
LT018	CN	Microbial alcohol production process	Granted	200980108672.1	200980108672.1
LT018	EA	Microbial alcohol production process	Natl Valid	201071067	019266
LT018	EP	Microbial alcohol production process	Natl Valid	09720425.9	2250274
LT018	HK	Microbial alcohol production process	Granted	11104674.2	1150631B
LT018	IN	Microbial alcohol production process	Pending	6213/DELNP/2010	
LT018	JP	Microbial alcohol production process	Published	2010-550626	
LT018	KR	Microbial alcohol production process	Granted	10-2010-7022809	10-1312107
LT018	NZ	Microbial alcohol production process	Granted	587563	587563
LT018	US	Microbial alcohol production process	Granted	12/921584	8119378
LT018	ZA	Microbial alcohol production process	Granted	2010/06146	2010/06146
LT018	JP	Microbial alcohol production process	Granted	2012-264362	5773972
LT018	AZ	Microbial alcohol production process	Granted	201071067	019266
LT018	KZ	Microbial alcohol production process	Granted	201071067	019266
LT018	RU	Microbial alcohol production process	Granted	201071067	019266
LT018	TM	Microbial alcohol production process	Granted	201071067	019266
LT018	NL	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	CZ	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	NO	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	CH	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	ES	Microbial alcohol production process	Granted	09720425.9	ES 2536786 T3
LT018	DE	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	FR	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	GB	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	FI	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	SE	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	PT	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	BE	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	AT	Microbial alcohol production process	Granted	09720425.9	2250274
LT018	TR	Microbial alcohol production process	Granted	09720425.9	2015 06363
LT019	US	Alcohol production process	Granted	12/428829	8119844
LT020	AU	Process for production of alcohols by microbial fermentation	Granted	2009258344	2009258344

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LT	Country	Subject Matter	Status	Application	Patent
LT020	BR	Process for production of alcohols by microbial fermentation	Published	PI0915017-0	
LT020	CA	Process for production of alcohols by microbial fermentation	Granted	2727549	2727549
LT020	CN	Process for production of alcohols by microbial fermentation	Granted	200980121712.6	200980121712.6
LT020	EA	Process for production of alcohols by microbial fermentation	Natl Valid	201071379	0018720
LT020	EP	Process for production of alcohols by microbial fermentation	Published	09762723.6	
LT020	HK	Process for production of alcohols by microbial fermentation	Published	11104675.1	
LT020	IN	Process for production of alcohols by microbial fermentation	Pending	8652/DELNP/2010	
LT020	JP	Process for production of alcohols by microbial fermentation	Granted	2011-513445	5618995
LT020	KR	Process for production of alcohols by microbial fermentation	Allowed	10-2011-7000650	
LT020	NZ	Process for production of alcohols by microbial fermentation	Granted	589632	589632
LT020	ZA	Process for production of alcohols by microbial fermentation	Granted	2010/08795	2010/08795
LT020	US	Process for production of alcohols by microbial fermentation	Granted	13/777806	8658408
LT020	RU	Process for production of alcohols by microbial fermentation	Granted	201071379	0018720
LT020	KZ	Process for production of alcohols by microbial fermentation	Granted	201071379	0018720
LT020	TM	Process for production of alcohols by microbial fermentation	Granted	201071379	0018720
LT020	AZ	Process for production of alcohols by microbial fermentation	Granted	201071379	0018720
LT025	CN	Optimised media containing nickel for fermentation of carbon monoxide	Published	200980155294.2	
LT025	EP	Optimised media containing nickel for fermentation of carbon monoxide	Natl Valid	09830636.8	EP2361312

LT	Country	Subject Matter	Status	Application	Patent
LT025	IN	Optimised media containing nickel for fermentation of carbon monoxide	Pending	4241/DELNP/2011	
LT025	KR	Optimised media containing nickel for fermentation of carbon monoxide	Granted	10-2011-7015336	1417235
LT025	US	Optimised media containing nickel for fermentation of carbon monoxide	Granted	13/058375	8354269
LT025	DE	Optimised media containing nickel for fermentation of carbon monoxide	Granted	09830636.8	EP2361312
LT025	GB	Optimised media containing nickel for fermentation of carbon monoxide	Granted	09830636.8	EP2361312
LT027	AU	Alcohol production process	Granted	2010214147	2010214147
LT027	BR	Alcohol production process	Pending	PI1008162-3	
LT027	CA	Alcohol production process	Granted	2751060	2751060
LT027	CN	Alcohol production process	Granted	201080013399.7	ZL201080013399.7
LT027	EP	Alcohol production process	Published	10741458.3	
LT027	HK	Alcohol production process	Published	11113636.7	
LT027	IN	Alcohol production process	Pending	6117/DELNP/2011	
LT027	JP	Alcohol production process	Granted	2011-547846	5726760
LT027	KR	Alcohol production process	Allowed	10-2011-7020129	
LT027	NZ	Alcohol production process	Granted	594329	594329
LT027	US	Alcohol production process	Published	13/847707	
LT028	CN	Methods of sustaining culture viability	Published	201080014015.3	
LT028	EP	Methods of sustaining culture viability	Published	10746498.4	
LT028	IN	Methods of sustaining culture viability	Pending	6629/DELNP/2011	
LT028	KR	Methods of sustaining culture viability	Published	10-2011-7022594	
LT028	US	Methods of sustaining culture viability	Granted	13/684215	8658415
LT028	CN	Methods of sustaining culture viability	Pending	201610571028	
LT031	AU	Carbon capture in fermentation	Granted	2010242175	2010242175
LT031	BR	Carbon capture in fermentation	Published	PI1015375-6	
LT031	CA	Carbon capture in fermentation	Granted	2759898	2759898
LT031	CN	Carbon capture in fermentation	Published	201080029403.9	
LT031	EA	Carbon capture in fermentation	Natl Valid	201171318	021007
LT031	EP	Carbon capture in fermentation	Natl Valid	10770002.3	2425003
LT031	HK	Carbon capture in fermentation	Granted	12102369.5	11617458
LT031	ID	Carbon capture in fermentation	Granted	W-00201104387	IDP000035348

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LT031	IN	Carbon capture in fermentation	Pending	9260/DELNP/2011	
LT031	JP	Carbon capture in fermentation	Pending	2012-508419	
LT031	KR	Carbon capture in fermentation	Granted	10-2011-7028604	10-1317719
LT031	NZ	Carbon capture in fermentation	Granted	596028	596028
LT031	US	Carbon capture in fermentation	Granted	13/058678	8263372
LT031	ZA	Carbon capture in fermentation	Granted	2011/08692	2011/08692
LT031	JP	Carbon capture in fermentation	Granted	2013-233806	5788950
LT031	KZ	Carbon capture in fermentation	Granted	201171318	021007
LT031	RU	Carbon capture in fermentation	Granted	201171318	021007
LT031	AT	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	BE	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	CH	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	CZ	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	DE	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	ES	Carbon capture in fermentation	Granted	10770002.3	2547428
LT031	FI	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	FR	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	GB	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	NL	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	NO	Carbon capture in fermentation	Granted	10770002.3	2425003
LT031	SE	Carbon capture in fermentation	Granted	10770002.3	2425003
LT033	CN	Alcohol production process	Allowed	201080030113.6	
LT033	EP	Alcohol production process	Published	10794423.3	
LT033	IN	Alcohol production process	Pending	646/DELNP/2012	
LT033	KR	Alcohol production process	Pending	10-2012-7003000	
LT033	US	Alcohol production process	Granted	13/872646	8906655
LT035	AU	Fermentation of gaseous substrates	Granted	2010290201	2010290201
LT035	GC	Fermentation of gaseous substrates	Pending	2010/16701	
LT035	NZ	Fermentation of gaseous substrates	Granted	598279	598279
LT035	TW	Fermentation of gaseous substrates	Granted	099130105	I490328
LT035	US	Fermentation of gaseous substrates	Granted	13/058727	8178330
LT035	CN	Fermentation of gaseous substrates	Granted	201080039626.3	201080039626.3
LT035	EP	Fermentation of gaseous substrates	Natl Valid	10814012.0	2519641
LT035	NO	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	IT	Fermentation of gaseous substrates	Granted	10814012.0	2519641

LT	Country	Subject Matter	Status	Application	Patent
LT035	IE	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	BE	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	AT	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	FI	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	FR	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	DE	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	NL	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	TR	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT035	GB	Fermentation of gaseous substrates	Granted	10814012.0	2519641
LT040	IN	Alcohol production process	Pending	5452/DELNP/2012	
LT041	NZ	Alcohol production process	Granted	600866	600866
LT041	US	Alcohol production process	Granted	13/119582	8377665
LT041	AU	Alcohol production process	Granted	2011205873	2011205873
LT041	CA	Alcohol production process	Granted	2786751	2786751
LT041	EP	Alcohol production process	Granted	11733140.5	2524046
LT041	IN	Alcohol production process	Pending	5816/DELNP/2012	
LT041	MY	Alcohol production process	Allowed	PI 2012003143	
LT041	KR	Alcohol production process	Granted	10-2012-7021255	10-1317447
LT041	CN	Alcohol production process	Granted	2011800061048	2011800061048
LT041	CN	Alcohol production process	Published	20161101130270	
LT041	EP	Alcohol production process	Published	16184936.3	
LT041	AT	Alcohol production process	Granted	11733140.5	2524046
LT041	BE	Alcohol production process	Granted	11733140.5	2524046
LT041	CH	Alcohol production process	Granted	11733140.5	2524046
LT041	CZ	Alcohol production process	Granted	11733140.5	2524046
LT041	DE	Alcohol production process	Granted	11733140.5	2524046
LT041	ES	Alcohol production process	Granted	11733140.5	ES 2578229 T3
LT041	FI	Alcohol production process	Granted	11733140.5	2524046
LT041	FR	Alcohol production process	Granted	11733140.5	2524046
LT041	GB	Alcohol production process	Granted	11733140.5	2524046
LT041	NL	Alcohol production process	Granted	11733140.5	2524046
LT041	NO	Alcohol production process	Granted	11733140.5	2524046
LT041	PT	Alcohol production process	Granted	11733140.5	2524046
LT041	SE	Alcohol production process	Granted	11733140.5	2524046
LT042	EP	Acid production by fermentation	Published	11753677.1	

LT	Country	Subject Matter	Status	Application	Patent
LT042	IN	Acid production by fermentation	Pending	7843/DELNP/2012	
LT042	CN	Acid production by fermentation	Granted	2011800132255	2011800132255
LT042	US	Acid production by fermentation	Granted	13/720281	8900836
LT044	GC	Improved fermentation of waste gases	Pending	2011/18342	
LT044	TW	Improved fermentation of waste gases	Granted	100115699	I509073
LT044	AU	Improved fermentation of waste gases	Granted	2011249140	2011249140
LT044	IN	Improved fermentation of waste gases	Pending	9271/DELNP/2012	
LT044	CN	Improved fermentation of waste gases	Published	2011800295661	
LT046	CA	Alcohol production process	Granted	2781876	2781876
LT046	AU	Alcohol production process	Granted	2011255662	2011255662
LT046	EA	Alcohol production process	Published	201291308	
LT046	EP	Alcohol production process	Allowed	11783806.0	
LT046	IN	Alcohol production process	Pending	9731/DELNP/2012	
LT046	CN	Alcohol production process	Granted	2011800294781	2011800294781
LT047	GC	Novel bacteria and methods of use thereof	Pending	2011/18955	
LT047	CA	Novel bacteria and methods of use thereof	Granted	2786903	2786903
LT047	EP	Novel bacteria and methods of use thereof	Natl Valid	11812829.7	2598630
LT047	AU	Novel bacteria and methods of use thereof	Granted	2011283282	2011283282
LT047	BR	Novel bacteria and methods of use thereof	Pending	BR112013003644-3	
LT047	EA	Novel bacteria and methods of use thereof	Allowed	201390179	
LT047	ID	Novel bacteria and methods of use thereof	Published	W-00201300834	
LT047	JP	Novel bacteria and methods of use thereof	Granted	2013-521734	5922657
LT047	KR	Novel bacteria and methods of use thereof	Granted	10-2013-7005437	1375038
LT047	ZA	Novel bacteria and methods of use thereof	Granted	2013/00612	2013/00612
LT047	IN	Novel bacteria and methods of use thereof	Pending	929/DELNP/2013	
LT047	CN	Novel bacteria and methods of use thereof	Granted	201180046882	201180046882
LT047	NZ	Novel bacteria and methods of use thereof	Granted	605798	605798
LT047	US	Novel bacteria and methods of use thereof	Published	14/874665	
LT047	GB	Novel bacteria and methods of use thereof	Granted	11812829.7	2598630
LT047	DE	Novel bacteria and methods of use thereof	Granted	11812829.7	2598630
LT047	BE	Novel bacteria and methods of use thereof	Granted	11812829.7	2598630
LT047	NL	Novel bacteria and methods of use thereof	Granted	11812829.7	2598630
LT047	FR	Novel bacteria and methods of use thereof	Granted	11812829.7	2598630
LT051	NZ	Recombinant microorganism and methods of production thereof	Granted	609150	609150

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LT051	CA	Recombinant microorganism and methods of production thereof	Granted	2813431	2813431
LT051	CN	Recombinant microorganism and methods of production thereof	Published	2011800621143	
LT051	EP	Recombinant microorganism and methods of production thereof	Published	11834686.5	
LT051	IN	Recombinant microorganism and methods of production thereof	Pending	3226/DELNP/2013	
LT051	BR	Recombinant microorganism and methods of production thereof	Pending	BR112013009552-0	
LT051	EA	Recombinant microorganism and methods of production thereof	Published	201390444	
LT051	ID	Recombinant microorganism and methods of production thereof	Published	W-00201304646	
LT051	JP	Recombinant microorganism and methods of production thereof	Published	2013-534846	
LT051	MY	Recombinant microorganism and methods of production thereof	Allowed	PI 2013700647	MY-157111-A
LT051	AU	Recombinant microorganism and methods of production thereof	Granted	2011318676	2011318676
LT051	ZA	Recombinant microorganism and methods of production thereof	Granted	2013/02898	2013/02898
LT051	KR	Recombinant microorganism and methods of production thereof	Allowed	10-2014-7000771	
LT051	US	Recombinant microorganism and methods of production thereof	Granted	14/180423	9359611
LT052	TW	Methods and systems for the production of hydrocarbon products	Allowed	100138365	
LT052	US	Methods and systems for the production of hydrocarbon products	Granted	13/579071	8809015
LT052	CA	Methods and systems for the production of hydrocarbon products	Granted	2789330	2789330
LT052	AU	Methods and systems for the production of hydrocarbon products	Granted	2011316891	2011316891
LT052	CN	Methods and systems for the production of hydrocarbon products	Published	2011800623064	

LT	Country	Subject Matter	Status	Application	Patent
LT052	EP	Methods and systems for the production of hydrocarbon products	Published	11835194.9	
LT052	IN	Methods and systems for the production of hydrocarbon products	Pending	3225/DELNP/2013	
LT052	KR	Methods and systems for the production of hydrocarbon products	Granted	10-2013-7011355	1450495
LT052	ID	Methods and systems for the production of hydrocarbon products	Published	W-00201301648	
LT052	EA	Methods and systems for the production of hydrocarbon products	Published	201390588	
LT052	MY	Methods and systems for the production of hydrocarbon products	Allowed	PI 2013700646	
LT052	AE	Methods and systems for the production of hydrocarbon products	Pending	435/2013	
LT052	CA	Methods and systems for the production of hydrocarbon products	Granted	2829702	2829702
LT054	TW	Methods and systems for the production of hydrocarbon products	Granted	100139475	I534266
LT054	CA	Methods and systems for the production of hydrocarbon products	Granted	2789246	2789246
LT054	AU	Methods and systems for the production of hydrocarbon products	Granted	2011320544	2011320544
LT054	IN	Methods and systems for the production of hydrocarbon products	Pending	3471/DELNP/2013	
LT054	ID	Methods and systems for the production of hydrocarbon products	Pending	W-00201301819	
LT054	KR	Methods and systems for the production of hydrocarbon products	Granted	10-2013-7013832	1440742
LT054	EA	Methods and systems for the production of hydrocarbon products	Allowed	201390602	
LT054	EP	Methods and systems for the production of hydrocarbon products	Published	11837137.6	
LT054	MY	Methods and systems for the production of hydrocarbon products	Pending	PI 2013700686	
LT054	CN	Methods and systems for the production of hydrocarbon products	Published	2011800637962	

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LT054	AE	Methods and systems for the production of hydrocarbon products	Pending	475/2013	
LT057	TW	Fermentation method	Published	100138366	
LT057	CA	Fermentation method	Granted	2789333	2789333
LT057	US	Fermentation method	Published	13/882688	
LT057	ID	Fermentation method	Published	W-00201302158	
LT057	EA	Fermentation method	Granted	201390593	024224
LT057	MY	Fermentation method	Allowed	PI 2013700840	
LT057	CN	Fermentation method	Granted	2011800623045	2011800623045
LT057	AU	Fermentation method	Granted	2011316899	2011316899
LT057	CA	Fermentation method	Granted	2836686	2836686
LT061	US	Fermentation method	Granted	13/330568	8663949
LT061	AU	Fermentation method	Granted	2011349523	2011349523
LT061	CA	Fermentation method	Published	2820941	
LT061	CN	Fermentation method	Published	201180067969.5	
LT061	EA	Fermentation method	Granted	201390878	0023403
LT061	IN	Fermentation method	Pending	5318/DELNP/2013	
LT062	AU	Recombinant microorganisms with increased tolerance to ethanol	Granted	2011357608	2011357608
LT062	US	Recombinant microorganisms with increased tolerance to ethanol	Published	14/828506	
LT064	TW	Recombinant microorganisms and uses therefor	Allowed	101106425	
LT064	US	Recombinant microorganisms and uses therefor	Granted	13/403972	9410130
LT064	US	Recombinant microorganisms and uses therefor	Granted	13/459211	9365868
LT064	AU	Recombinant microorganisms and uses therefor	Granted	2012221176	2012221176
LT064	NZ	Recombinant microorganisms and uses therefor	Granted	614459	614459
LT064	CA	Recombinant microorganisms and uses therefor	Published	2825267	
LT064	EP	Recombinant microorganisms and uses therefor	Published	12749472.2	

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LT064	MY	Recombinant microorganisms and uses therefor	Pending	PI 2013701492	
LT064	IN	Recombinant microorganisms and uses therefor	Pending	7641/DELNP/2013	
LT064	KR	Recombinant microorganisms and uses therefor	Pending	10-2013-7025077	
LT064	BR	Recombinant microorganisms and uses therefor	Pending	112013021524-0	
LT064	JP	Recombinant microorganisms and uses therefor	Published	2013-555385	
LT064	CN	Recombinant microorganisms and uses therefor	Published	201280020456.3	
LT064	US	Recombinant microorganisms and uses therefor	Pending	15/205891	
LT065	US	Fermentation process for controlling butanediol production	Granted	13/435453	8673603
LT065	TW	Fermentation process for controlling butanediol production	Granted	101111536	I537389
LT065	CN	Fermentation process for controlling butanediol production	Published	201280026205.6	
LT066	US	Process for the production of esters	Granted	13/477827	8658402
LT068	US	A fermentation process	Published	14/360645	
LT068	MY	A fermentation process	Pending	PI2015001328	
LT068	JP	A fermentation process	Published	2015-546415	
LT068	BR	A fermentation process	Pending	BR 11 2015 013011 9	
LT068	CA	A fermentation process	Allowed	2892303	
LT068	CN	A fermentation process	Published	201280078111.3	
LT068	AU	A fermentation process	Pending	2012396327	
LT068	EA	A fermentation process	Pending	201591043	
LT068	ID	A fermentation process	Pending	P00201503535	
LT068	EP	A fermentation process	Published	12889517.4	
LT068	IN	A fermentation process	Pending	4745/DELNP/2015	
LT068	KR	A fermentation process	Pending	10-2015-7016942	
LT068	ZA	A fermentation process	Pending	2015/03870	
LT068	NZ	A fermentation process	Pending	708502	
LT070	US	Fermentation process	Granted	13/607314	9068202

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LT070	AU	Fermentation process	Allowed	2012305021	
LT070	KR	Fermentation process	Pending	10-2014-7009154	
LT070	EP	Fermentation process	Published	12830218.9	
LT070	IN	Fermentation process	Pending	2399/DELNP/2014	
LT070	CN	Fermentation process	Published	2012800439874	
LT070	MY	Fermentation process	Pending	PI 2014000529	
LT070	ID	Fermentation process	Published	P00201402017	
LT071	US	Method for controlling the sulphur concentration in a fermentation method	Granted	13/851772	8735115
LT071	CN	Method for controlling the sulphur concentration in a fermentation method	Published	2013800289392	
LT071	IN	Method for controlling the sulphur concentration in a fermentation method	Pending	7980/DELNP/2014	
LT071	EP	Method for controlling the sulphur concentration in a fermentation method	Published	13769156.4	
LT071	KR	Method for controlling the sulphur concentration in a fermentation method	Pending	10-2014-7030406	
LT071	EA	Method for controlling the sulphur concentration in a fermentation method	Published	201491785	
LT072	US	Fermentation process	Published	14/093249	
LT072	CN	Fermentation process	Published	2013800572057	
LT072	MY	Fermentation process	Pending	PI 2015001046	
LT072	IN	Fermentation process	Pending	3467/DELNP/2015	
LT072	EP	Fermentation process	Published	13857972.7	
LT072	ID	Fermentation process	Published	P00201502838	
LT072	US	Fermentation process	Published	14/927950	
LT072	WO	Fermentation process	Published	PCT/US15/58525	
LT073	EA	Improved carbon capture in fermentation	Allowed	201491454	
LT073	CA	Improved carbon capture in fermentation	Granted	2862554	2862554
LT074	US	Recombinant microorganisms and methods of use thereof	Granted	13/876563	9057071
LT074	AU	Recombinant microorganisms and methods of use thereof	Granted	2013215706	2013215706
LT074	KR	Recombinant microorganisms and methods of use thereof	Granted	10-2013-7032063	1511639

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LT074	EP	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	IN	Recombinant microorganisms and methods of use thereof	Pending	6390/DELNP/2014	
LT074	CN	Recombinant microorganisms and methods of use thereof	Published	201380018640.9	
LT074	MY	Recombinant microorganisms and methods of use thereof	Pending	PI 2014002189	
LT074	ID	Recombinant microorganisms and methods of use thereof	Published	P00201405183	
LT074	JP	Recombinant microorganisms and methods of use thereof	Published	2014-555522	
LT074	BR	Recombinant microorganisms and methods of use thereof	Pending	1120140188440	
LT074	CA	Recombinant microorganisms and methods of use thereof	Allowed	2862790	
LT074	EA	Recombinant microorganisms and methods of use thereof	Published	201491418	
LT074	ZA	Recombinant microorganisms and methods of use thereof	Pending	2014/05858	
LT074	US	Recombinant microorganisms and methods of use thereof	Granted	14/703222	9297026
LT074	AT	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	BE	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	CZ	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	FI	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	FR	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	DE	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	IT	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117

LT	Country	Subject Matter	Status	Application	Patent
LT074	NL	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	NO	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	ES	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	SE	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	CH	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT074	GB	Recombinant microorganisms and methods of use thereof	Granted	13743087.2	2710117
LT075	US	Enzyme altered metabolite activity	Published	13/857875	
LT075	TW	Enzyme altered metabolite activity	Published	102113451	
LT075	JP	Enzyme altered metabolite activity	Published	2015-504735	
LT075	CN	Enzyme altered metabolite activity	Published	2013800296150	
LT075	EP	Enzyme altered metabolite activity	Published	13772074.4	
LT075	IN	Enzyme altered metabolite activity	Pending	8339/DELNP/2014	
LT075	KR	Enzyme altered metabolite activity	Pending	10-2014-7030848	
LT075	NZ	Enzyme altered metabolite activity	Allowed	700609	
LT076	US	Fermentation and simulated moving bed process	Granted	13/901455	8980596
LT076	AU	Fermentation and simulated moving bed process	Granted	2013266194	2013266194
LT076	CN	Fermentation and simulated moving bed process	Published	201380037817	
LT076	KR	Fermentation and simulated moving bed process	Pending	10-2014-7035995	
LT076	JP	Fermentation and simulated moving bed process	Published	2015-514208	
LT076	EA	Fermentation and simulated moving bed process	Published	201492057	
LT076	IN	Fermentation and simulated moving bed process	Pending	9575/DELNP/2014	
LT076	EP	Fermentation and simulated moving bed process	Published	13793361.0	

LT	Country	Subject Matter	Status	Application	Patent
LT076	CA	Fermentation and simulated moving bed process	Allowed	2873791	
LT076	US	Fermentation and simulated moving bed process	Published	14/630617	
LT077	BR	Biomass liquefaction through gas fermentation	Pending	BR 11 2015 010621 8	
LT077	CN	Biomass liquefaction through gas fermentation	Published	2013800645240	
LT077	EA	Biomass liquefaction through gas fermentation	Published	201590905/26	
LT077	ID	Biomass liquefaction through gas fermentation	Pending	P00201503317	
LT077	JP	Biomass liquefaction through gas fermentation	Published	2015-541989	
LT077	KR	Biomass liquefaction through gas fermentation	Pending	10-2015-7015272	
LT077	CA	Biomass liquefaction through gas fermentation	Allowed	2890902	
LT077	EP	Biomass liquefaction through gas fermentation	Published	13853959.8	
LT077	IN	Biomass liquefaction through gas fermentation	Pending	4190/DELNP/2015	
LT077	NZ	Biomass liquefaction through gas fermentation	Unfiled		
LT077	AU	Biomass liquefaction through gas fermentation	Pending	2013342087	
LT077	ZA	Biomass liquefaction through gas fermentation	Pending	2015/03551	
LT078	US	Recombinant microorganisms and uses therefor	Published	13/905143	
LT078	CN	Recombinant microorganisms and uses therefor	Published	20138004079333	
LT078	EP	Recombinant microorganisms and uses therefor	Published	13797085.1	
LT078	JP	Recombinant microorganisms and uses therefor	Published	2015514947	

LT	Country	Subject Matter	Status	Application	Patent
LT078	CA	Recombinant microorganisms and uses therefor	Granted	2874832	2874832
LT078	KR	Recombinant microorganisms and uses therefor	Pending	10-2014-7036589	
LT078	IN	Recombinant microorganisms and uses therefor	Pending	10168/DELNP/2014	
LT079	EA	Recombinant microorganisms and uses therefor	Published	201492206	
LT079	IN	Recombinant microorganisms and uses therefor	Pending	10236/DELNP/2014	
LT079	EP	Recombinant microorganisms and uses therefor	Published	13797982.9	
LT079	JP	Recombinant microorganisms and uses therefor	Published	2015-514948	
LT079	CN	Recombinant microorganisms and uses therefor	Published	201380041086.6	
LT079	US	Recombinant microorganisms and uses therefor	Published	14/656827	
LT080	US	Recombinant microorganisms and uses therefor	Granted	13/923352	9347076
LT080	CN	Recombinant microorganisms and uses therefor	Published	201380044519	
LT080	ID	Recombinant microorganisms and uses therefor	Pending	P00201500251	
LT080	JP	Recombinant microorganisms and uses therefor	Published	2015-518359	
LT080	KR	Recombinant microorganisms and uses therefor	Pending	10-2015-7000238	
LT080	BR	Recombinant microorganisms and uses therefor	Pending	BR 11 2014 031876 0	
LT080	MY	Recombinant microorganisms and uses therefor	Pending	PI2014003406	
LT080	EP	Recombinant microorganisms and uses therefor	Published	13806177.5	
LT080	CA	Recombinant microorganisms and uses therefor	Published	2876178	

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LT	Country	Subject Matter	Status	Application	Patent
LT080	IN	Recombinant microorganisms and uses therefor	Pending	10507DELNP/2014	
LT081	US	Recombinant microorganisms and uses therefor	Published	13/914234	
LT081	BR	Recombinant microorganisms and uses therefor	Pending	BR 11 2014 030713 0	
LT081	CN	Recombinant microorganisms and uses therefor	Published	2013800422933	
LT081	JP	Recombinant microorganisms and uses therefor	Published	2015-516270	
LT081	KR	Recombinant microorganisms and uses therefor	Pending	10-2014-7036648	
LT081	ID	Recombinant microorganisms and uses therefor	Pending	P00201500189	
LT081	EP	Recombinant microorganisms and uses therefor	Published	13800454.4	
LT081	IN	Recombinant microorganisms and uses therefor	Pending	10508/DELNP/2014	
LT082	US	Selection method and recombinant microorganisms and uses therefor	Pending	15/285179	
LT082	CN	Selection method and recombinant microorganisms and uses therefor	Published	2013800393165	
LT082	EP	Selection method and recombinant microorganisms and uses therefor	Published	13793326.3	
LT083	US	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Granted	14/011872	9284564
LT083	CN	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Published	2013800457913	
LT083	KR	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Pending	10-2015-7004952	
LT083	JP	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Published	2015-529999	

LT	Country	Subject Matter	Status	Application	Patent
LT083	CA	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Published	2882276	
LT083	EP	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Published	13833516.1	
LT083	IN	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Pending	1365/DELNP/2015	
LT083	NZ	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Pending	705169	
LT083	SG	Recombinant microorganisms comprising stereospecific diol dehydratase enzyme and methods related thereto	Pending	11201501254R	
LT084	US	System and method for improved gas dissolution	Granted	14/166567	9327251
LT084	BR	System and method for improved gas dissolution	Pending	BR 11 2015 017860 0	
LT084	CN	System and method for improved gas dissolution	Published	2014800063827	
LT084	EA	System and method for improved gas dissolution	Published	201591341	
LT084	ID	System and method for improved gas dissolution	Pending	P00201504944	
LT084	JP	System and method for improved gas dissolution	Published	2015-555124	
LT084	KR	System and method for improved gas dissolution	Pending	10-2015-7020962	
LT084	AU	System and method for improved gas dissolution	Pending	2014213063	
LT084	MY	System and method for improved gas dissolution	Pending	PI2015001827	
LT084	CA	System and method for improved gas dissolution	Allowed	2899066	

LT	Country	Subject Matter	Status	Application	Patent
LT084	EP	System and method for improved gas dissolution	Published	14745496.1	
LT084	IN	System and method for improved gas dissolution	Pending	6768/DELNP/2015	
LT084	ZA	System and method for improved gas dissolution	Pending	2015/05676	
LT086	US	Fermentation process	Published	14/080870	
LT086	CN	Fermentation process	Published	201380085201	
LT086	ID	Fermentation process	Published	P00201502837	
LT086	MY	Fermentation process	Pending	PI 2015001131	
LT086	IN	Fermentation process	Pending	3884/DELNP/2015	
LT086	EP	Fermentation process	Published	13854985.2	
LT088	US	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Granted	14/168810	9422565
LT088	CN	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Published	2014800068229	
LT088	JP	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Published	2015-555441	
LT088	KR	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Pending	10-2015-7023535	
LT085	CA	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Published	2899587	
LT085	IN	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Pending	6736/DELNP/2015	
LT088	EP	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Published	14745530.7	
LT088	AU	Recombinant microorganisms comprising NADPH dependent enzymes and methods of production therefor	Pending	2014212462	

LT	Country	Subject Matter	Status	Application	Patent
LT089	US	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	14/297577	
LT089	BR	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Pending	BR 11 2015 030208 4	
LT089	CN	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	2014800316657	
LT089	EA	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	201592169	
LT089	JP	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	2016-518016	
LT089	KR	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Pending	10-2015-7035934	
LT089	EP	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	14807846.2	
LT089	IN	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Pending	10984/DELNP/2015	
LT089	CA	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Pending	2814993	
LT089	AU	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Pending	2014274838	
LT090	US	Recombinant microorganisms and methods of use thereof	Published	14/484402	
LT090	WO	Recombinant microorganisms and methods of use thereof	Natl Valid	PCT/US14/55318	
LT090	CN	Recombinant microorganisms and methods of use thereof	Published	2014800456614	

LT	Country	Subject Matter	Status	Application	Patent
LT090	KR	Recombinant microorganisms and methods of use thereof	Pending	10-2016-7006414	
LT090	AU	Recombinant microorganisms and methods of use thereof	Pending	2014318672	
LT090	EP	Recombinant microorganisms and methods of use thereof	Published	14844036.5	
LT090	SG	Recombinant microorganisms and methods of use thereof	Pending	11201601263W	
LT090	CA	Recombinant microorganisms and methods of use thereof	Published	2921430	
LT091	US	Systems and methods for controlling metabolite production in microbial fermentation	Published	14/207426	
LT091	BR	Systems and methods for controlling metabolite production in microbial fermentation	Pending	BR 11 2015 022736 8	
LT091	CN	Systems and methods for controlling metabolite production in microbial fermentation	Published	201480015415.4	
LT091	EA	Systems and methods for controlling metabolite production in microbial fermentation	Published	201591547	
LT091	ID	Systems and methods for controlling metabolite production in microbial fermentation	Pending	P00201505603	
LT091	JP	Systems and methods for controlling metabolite production in microbial fermentation	Published	2016-501752	
LT091	KR	Systems and methods for controlling metabolite production in microbial fermentation	Pending	10-2015-7025517	
LT091	CA	Systems and methods for controlling metabolite production in microbial fermentation	Allowed	2903462	

LT	Country	Subject Matter	Status	Application	Patent
LT091	ZA	Systems and methods for controlling metabolite production in microbial fermentation	Pending	2015/06621	
LT091	MY	Systems and methods for controlling metabolite production in microbial fermentation	Pending	PI 2015702979	
LT091	SG	Systems and methods for controlling metabolite production in microbial fermentation	Pending	11201507071Y	
LT091	EP	Systems and methods for controlling metabolite production in microbial fermentation	Published	14768693.5	
LT091	IN	Systems and methods for controlling metabolite production in microbial fermentation	Pending	8128/DELNP/2015	
LT093	US	Fermentation of gaseous substrates	Granted	14/309864	9340802
LT094	US	Multiple reactor system for continuous gas fermentation	Published	14/324140	
LT094	WO	Multiple reactor system for continuous gas fermentation	Published	PCT/NZ2014/000137	
LT094	CN	Multiple reactor system for continuous gas fermentation	Published	2014800376855	
LT094	EA	Multiple reactor system for continuous gas fermentation	Published	201690145	
LT094	JP	Multiple reactor system for continuous gas fermentation	Pending	2016-523690	
LT094	EP	Multiple reactor system for continuous gas fermentation	Published	14820685.7	
LT094	IN	Multiple reactor system for continuous gas fermentation	Pending	11672/DELNP/2015	
LT094	CA	Multiple reactor system for continuous gas fermentation	Published	2917139	
LT095	US	Improved fermentation of gaseous substrates (secondary loop reactor)	Published	14/341731	
LT095	BR	Fermentation of gaseous substrates	Pending	BR 11 2016 0017773	
LT095	CN	Fermentation of gaseous substrates	Published	2014800424878	

LT	Country	Subject Matter	Status	Application	Patent
LT095	EA	Fermentation of gaseous substrates	Published	201690272	
LT095	ID	Fermentation of gaseous substrates	Pending	P0020160000190	
LT095	JP	Fermentation of gaseous substrates	Published	2016-531576	
LT095	KR	Fermentation of gaseous substrates	Pending	10-2016-7001615	
LT095	CA	Fermentation of gaseous substrates	Published	2917862	
LT095	ZA	Fermentation of gaseous substrates	Pending	2016/00796	
LT095	EP	Fermentation of gaseous substrates	Published	14831213.5	
LT095	IN	Fermentation of gaseous substrates	Pending	201617001169	
LT096	US	Carbon capture in fermentation	Published	14/516564	
LT096	WO	Carbon capture in fermentation	Natl Valid	PCT/US14/60980	
LT096	BR	Carbon capture in fermentation	Pending	BR 11 2016 008659 7	
LT096	TH	Carbon capture in fermentation	Pending	1601002158	
LT096	KR	Carbon capture in fermentation	Pending	10-2016-7011385	
LT096	EA	Carbon capture in fermentation	Pending	201690646	
LT096	CN	Carbon capture in fermentation	Pending	2014800573016	
LT096	JP	Carbon capture in fermentation	Pending	2016-522808	
LT096	AE	Carbon capture in fermentation	Pending	434/2016	
LT096	OA	Carbon capture in fermentation	Unfiled		
LT096	EP	Carbon capture in fermentation	Published	14853873.9	
LT096	ZA	Carbon capture in fermentation	Pending	2016/02666	
LT096	IN	Carbon capture in fermentation	Pending	201617013165	
LT096	AU	Carbon capture in fermentation	Pending	2014337188	
LT096	CA	Carbon capture in fermentation	Published	2927823	
LT096	MY	Carbon capture in fermentation	Pending	PI2016701332	
LT097	US	Fermentation process	Allowed	14/493287	
LT097	WO	Fermentation process	Published	PCT/US14/56846	
LT097	CN	Fermentation process	Published	2014800521399	
LT097	EA	Fermentation process	Pending	201690570	
LT097	JP	Fermentation process	Pending	2016-544053	
LT097	KR	Fermentation process	Pending	10-2016-7008826	
LT097	CA	Fermentation process	Published	2924976	
LT097	EP	Fermentation process	Published	14845503.3	
LT098	US	Microbial conversion of methane	Published	14/519075	
LT098	WO	Microbial conversion of methane	Published	PCT/US14/61424	
LT098	CN	Microbial conversion of methane	Published	2014800563762	

LT	Country	Subject Matter	Status	Application	Patent
LT098	RU	Microbial conversion of methane	Pending	2016116677	
LT098	EP	Microbial conversion of methane	Published	14854055.2	
LT098	CA	Microbial conversion of methane	Published	2927829	
LT098	MY	Microbial conversion of methane	Pending	PI 2016701148	
LT098	EA	Microbial conversion of methane	Pending	2016116677	
LT099	US	Method of producing a recombinant microorganism	Granted	14/608132	9315830
LT099	WO	Method of producing a recombinant microorganism	Published	PCT/US15/13373	
LT099	KR	Method of producing a recombinant microorganism	Pending	10-2016-7021900	
LT099	EP	Method of producing a recombinant microorganism	Pending	15743463.0	
LT099	CN	Method of producing a recombinant microorganism	Published	2016-524927	
LT099	SG	Method of producing a recombinant microorganism	Pending	11201605775U	
LT099	AU	Method of producing a recombinant microorganism	Pending	2015211015	
LT099	CA	Method of producing a recombinant microorganism	Published	2936251	
LT100	US	Bacterium with increased tolerance to butyric acids	Published	14/608151	
LT100	WO	Bacterium with increased tolerance to butyric acids	Natl Valid	PCT/US15/13379	
LT100	JP	Bacterium with increased tolerance to butyric acids	Pending	2016-548668	
LT100	BR	Bacterium with increased tolerance to butyric acids	Pending	BR 11 2016 017426 7	
LT100	KR	Bacterium with increased tolerance to butyric acids	Pending	10-2016-7020301	
LT100	IN	Bacterium with increased tolerance to butyric acids	Pending	201617025923	
LT100	CA	Bacterium with increased tolerance to butyric acids	Published	2936424	

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LT	Country	Subject Matter	Status	Application	Patent
LT100	CN	Bacterium with increased tolerance to butyric acids	Published	201580006308	
LT100	EP	Bacterium with increased tolerance to butyric acids	Pending	15742642.0	
LT101	US	Microorganisms and methods for the production of ketones	Published	14/559881	
LT101	WO	Microorganisms and methods for the production of ketones	Natl Valid	PCT/US14/68463	
LT101	BR	Microorganisms and methods for the production of ketones	Pending	BR 11 2016 012634.3	
LT101	EP	Microorganisms and methods for the production of ketones	Published	14867101.9	
LT101	CA	Microorganisms and methods for the production of ketones	Published	2931627	
LT101	IN	Microorganisms and methods for the production of ketones	Pending	201617019270	
LT101	KR	Microorganisms and methods for the production of ketones	Pending	10-2016-7017027	
LT101	MY	Microorganisms and methods for the production of ketones	Pending	PI 2016701888	
LT101	CN	Microorganisms and methods for the production of ketones	Published	201480072228	
LT101	JP	Microorganisms and methods for the production of ketones	Pending	2016-536159	
LT102	US	Recombinant microorganisms and methods of use thereof	Published	14/609420	
LT102	WO	Recombinant microorganisms and methods of use thereof	Natl Valid	PCT/US15/13625	
LT102	KR	Recombinant microorganisms and methods of use thereof	Pending	10-2016-7019933	
LT102	BR	Recombinant microorganisms and methods of use thereof	Pending	BR 11 2016 017092 0	
LT102	EP	Recombinant microorganisms and methods of use thereof	Pending	15742928.3	
LT102	IN	Recombinant microorganisms and methods of use thereof	Pending	201617023719	

LT	Country	Subject Matter	Status	Application	Patent
LT102	CN	Recombinant microorganisms and methods of use thereof	Pending	2015800063075	
LT102	ID	Recombinant microorganisms and methods of use thereof	Pending	P00201604815	
LT102	MY	Recombinant microorganisms and methods of use thereof	Pending	PI 2016702509	
LT102	AU	Recombinant microorganisms and methods of use thereof	Pending	2015210892	
LT102	ZA	Recombinant microorganisms and methods of use thereof	Pending	2016/04870	
LT102	JP	Recombinant microorganisms and methods of use thereof	Pending	2016-549083	
LT102	EA	Recombinant microorganisms and methods of use thereof	Pending	201691383	
LT102	CA	Recombinant microorganisms and methods of use thereof	Published	2936252	
LT103	US	Fermentation process for the production and control of pyruvate-derived products	Allowed	14/283287	
LT103	TW	Fermentation process for the production and control of pyruvate-derived products	Published	104116326	
LT103	WO	Fermentation process for the production and control of pyruvate-derived products	Published	PCT/US15/31857	
LT105	WO	Genetically engineered bacterium with altered carbon monoxide dehydrogenase (CODH) activity	Published	PCT/US15/38395	
LT105	US	Genetically engineered bacterium with altered carbon monoxide dehydrogenase (CODH) activity	Granted	14/753191	9365873
LT106	US	Control of bioreactor processes	Published	14/329881	
LT106	WO	Control of bioreactor processes	Published	PCT/US15/39563	
LT106	TW	Control of bioreactor processes	Published	104117847	
LT109	US	Modified microorganisms for conversion of gas to aromatic hydrocarbons	Pending	15/166224	
LT109	WO	Modified microorganisms for conversion of gas to aromatic hydrocarbons	Pending	PCT/US16/34495	
LT110	TW	Multi-stage bioreactor processes	Published	104134761	

LT	Country	Subject Matter	Status	Application	Patent
LT110	US	Multi-stage bioreactor processes	Published	14/920862	
LT110	WO	Multi-stage bioreactor processes	Published	PCT/US15/57025	
LT111	TW	Gas testing unit and method	Published	104134733	
LT111	US	Gas testing unit and method	Published	14/919694	
LT111	WO	Gas testing unit and method	Published	PCT/US15/56783	
LT113	US	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	14/961146	
LT113	WO	Recombinant microorganisms exhibiting increased flux through a fermentation pathway	Published	PCT/US15/64351	
LT115	TW	Recombinant acetogenic bacterium for the conversion of methane to products	Pending	105105272	
LT115	WO	Recombinant acetogenic bacterium for the conversion of methane to products	Published	PCT/US16/19208	
LT115	US	Recombinant acetogenic bacterium for the conversion of methane to products	Published	15/051036	
LT116	US	Gas fermentation for the production of protein or feed	Pending	15/158479	
LT116	WO	Gas fermentation for the production of protein or feed	Pending	PCT/US16/33407	
LT117	TW	Genetically engineered bacterium comprising energy-generating fermentation pathway	Pending	Waiting	
LT117	US	Genetically engineered bacterium comprising energy-generating fermentation pathway	Pending	15/293191	
LT117	WO	Genetically engineered bacterium comprising energy-generating fermentation pathway	Pending	PCT/US16/56926	
LT118	US	Integrated fermentation and electrolysis process	Pending	62/289900	
LT119	US	Combined bleed/permeate beer column	Pending	62/291508	
LT120	US	Microorganism with modified hydrogenase activity	Pending	62/271466	

LT	Country	Subject Matter	Status	Application	Patent
LT121	US	Arginine supplementation to improve efficiency in gas fermenting acetogens	Pending	62/262886	
LT121	US	Arginine supplementation to improve efficiency in gas fermenting acetogens	Pending	62/262868	
LT122	US	CRISPR/Cas systems for C1-fixing bacteria	Pending	62/300532	
LT123	US	Distributed downcomer system for gas-liquid contacting	Pending	62/328592	
LT125	US	Microorganism with modified enzyme activity and related methods	Pending	62/336839	

EXHIBIT C

TRADEMARKS

Country	Mark	Class – Goods/Services	Status	Number
CN	LANZATECH	01 - Chemicals used in industry; 2,3 Butanediol; Isoprene; MEK(Methyl Ethyl Ketone); 1 -Butanol; Isopropanol; Acetone; Succinic Acid; Acrylic Acid; 2-Butanol; Biodiesel/Fatty Acid ethyl ester (FAEE); chemical additives for fuels; chemical additives for lubricants; biological preparations other than for medical or veterinary purposes; chemical preparations for scientific purposes other than for medical or veterinary use; bacterial preparations other than for medical or veterinary use; preparations of microorganisms other than for medical and veterinary use; cultures of microorganisms other than for medical and veterinary use.	Registered	8523502
CN	LanzaTech	01 - Chemicals used in industry; 2,3 Butanediol, Isoprene, MEK (Methyl Ethyl Ketone), I-Butanol, Isopropanol, Acetone, Succinic Acid, Acrylic Acid, 2-Butanol, Biodiesel/Fatty Acid ethyl ester (FAEE); chemical additives for fuels; chemical additives for lubricants; biological preparations other than for medical or veterinary purposes; chemical preparations for scientific purposes other than for medical or veterinary use; bacterial preparations other than for medical or veterinary use; preparations of microorganisms other than for medical and veterinary use; cultures of microorganisms other than for medical and veterinary use.	Registered	8523503
CN		01 - Chemicals used in industry; 2,3 Butanediol; Isoprene; MEK (Methyl Ethyl Ketone); 1-Butanol; Isopropanol; Acetone; Succinic Acid; Acrylic Acid; 2-Butanol; Biodiesel/Fatty Acid ethyl ester(FAEE); chemical additives for fuels; chemical additives for lubricants; biological preparations other than for medical or veterinary purposes; chemical preparations for scientific purposes other than for medical or veterinary use; bacterial preparations other than for medical or veterinary use; preparations of microorganisms other than for medical and veterinary use; cultures of microorganisms other than for medical and veterinary use.	Registered	8523508

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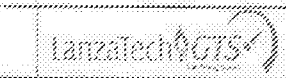
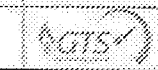
Country	Mark	Class – Goods/Services	Status	Number
CN	LANZATECH	04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non-chemical additives for oils and fuels.	Registered	8523518
CN		04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non-chemical additives for oils and fuels.	Registered	8523507
CN	LanzaTech	04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non-chemical additives for oils and fuels.	Registered	8943454
CN	朗泽	01 - Chemicals used in industry; 2,3 Butanediol; Isoprene; MEK (Methyl Ethyl Ketone); 1-Butanol; Isopropanol; Acetone; Succinic Acid; Acrylic Acid; 2-Butanol; Biodiesel/Fatty Acid ethyl ester(FAEE); chemical additives for fuels; chemical additives for lubricants; biological preparations other than for medical or veterinary purposes; chemical preparations for scientific purposes other than for medical or veterinary use; bacterial preparations other than for medical or veterinary use; preparations of microorganisms other than for medical and veterinary use; cultures of microorganisms other than for medical and veterinary use.	Registered	9242473
CN	朗泽	04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non-chemical additives for oils and fuels.	Registered	9242474

Country	Mark	Class – Goods/Services	Status	Number
CN	朗泽	40 - Production of energy; recycling of waste and trash; processing of microorganisms and bacteria; processing of fuels; production of fuels [production of energy]; processing of fuels using carbon monoxide component of waste flue gases as a feed; production of fuels using carbon monoxide component of waste flue gases as a feed (production of energy).	Registered	9242475
CN		40 - Production of energy; recycling of waste and trash; processing of microorganisms and bacteria; processing of fuels; production of fuels [production of energy]; processing of fuels using carbon monoxide component of waste flue gases as a feed; production of fuels using carbon monoxide component of waste flue gases as a feed (production of energy).	Registered	8523506
CN	LANZATECH	40 - Production of energy; recycling of waste and trash; processing of microorganisms and bacteria; processing of fuels; production of fuels [production of energy]; processing of fuels using carbon monoxide component of waste flue gases as a feed; production of fuels using carbon monoxide component of waste flue gases as a feed (production of energy).	Registered	8523517
CN	LanzaTech	40 - Production of energy; recycling of waste and trash; processing of microorganisms and bacteria; processing of fuels; production of fuels [production of energy]; processing of fuels using carbon monoxide component of waste flue gases as a feed; production of fuels using carbon monoxide component of waste flue gases as a feed (production of energy).	Registered	8523503

Country	Mark	Class – Goods/Services	Status	Number
EP	LANZATECH	01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone), i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms; alcohols; alcohol for fuel manufacture. 04 - Alcohol fuels; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	011666138
EP		01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone), i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms; alcohols; alcohol for fuel manufacture. 04 - Alcohol fuels; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	011666179

Country	Mark	Class – Goods/Services	Status	Number
IN	LANZATECH	01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone), i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and/or fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms. 04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	2091361
IN	LanzaTech LanzaTech	01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone), i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and/or fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms. 04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	2091358

Country	Mark	Class – Goods/Services	Status	Number
IN		01 - Chemicals used in industry; industrial chemicals, namely, 2, 3 butanediol, isoprene, methyl ethyl ketone, i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and fatty acid ethyl ester; chemical additives for fuels and lubricants; bacteria for use in fermentation processes; bacterial substances for industrial and scientific use, namely, bacterial substances and preparations, namely, bacteria for use in fermentation processes; preparations and cultures for microorganisms, namely, anaerobic preparations and cultures for use in fermentation processes. 04 - Alcohols, namely, alcohol and mixed alcohol fuel; alcohol for fuel manufacture, namely, fuels with an alcoholic base; ethyl fuels; gaseous fuels, liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel fuels; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production, treatment and refinement of microorganisms and bacteria; production, treatment and refinement of fuels; production, treatment and refinement of fuels using carbon monoxide component of waste flue gases as a feed.	Accepted	2091359
KZ		Class 09- Scientific, optical, weighing, measuring apparatus and instruments; testing kits for use in analysing gases.	Registered	51392
KZ		Class 09- Scientific, optical, weighing, measuring apparatus and instruments; testing kits for use in analysing gases.	Registered	52211

Country	Mark	Class – Goods/Services	Status	Number
NZ	LANZATECH	01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone), i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and/or fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms. 04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	827971
NZ		01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone),i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel/fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms. 04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	827989

Country	Mark	Class – Goods/Services	Status	Number
NZ	LanzaTech LanzaTech	01 - Chemicals used in industry; 2,3 butanediol, isoprene, MEK (Methyl Ethyl Ketone), i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and/or fatty acid ethyl ester (FAEE); chemical additives for fuels and lubricants; bacteria; bacterial substances for industrial and scientific use; bacterial substances and preparations; preparations and cultures for microorganisms. 04 - Alcohols; alcohol fuels; alcohol for fuel manufacture; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production and processing of microorganisms and bacteria; processing and production of fuels; processing and production of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	827979

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Country	Mark	Class – Goods/Services	Status	Number
US	LANZATECH	01 - Chemicals used in industry; industrial chemicals, namely, 2,3 butanediol, isoprene, methyl ethyl ketone, i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and fatty acid ethyl ester; chemical additives for fuels and lubricants; bacteria for use in fermentation processes; bacterial substances for industrial and scientific use, namely, bacterial substances and preparations, namely, bacteria for use in fermentation processes; preparations and cultures for microorganisms, namely, anaerobic preparations and cultures for use in fermentation processes. 04 - Alcohols, namely, alcohol and mixed alcohol fuel; alcohol for fuel manufacture, namely, fuels with an alcoholic base; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel fuels; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production, treatment and refinement of microorganisms and bacteria; production, treatment and refinement of fuels; production, treatment and refinement of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	4107710

Country	Mark	Class – Goods/Services	Status	Number
US	LanzaTech®	01 - Chemicals used in industry; industrial chemicals, namely, 2,3 butanediol, isoprene, methyl ethyl ketone, i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and fatty acid ethyl ester; chemical additives for fuels and lubricants; bacteria for use in fermentation processes; bacterial substances for industrial and scientific use, namely, bacterial substances and preparations, namely, bacteria for use in fermentation processes; preparations and cultures for microorganisms, namely, anaerobic preparations and cultures for use in fermentation processes. 04 - Alcohols, namely, alcohol and mixed alcohol fuel; alcohol for fuel manufacture, namely, fuels with an alcoholic base; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel fuels; non chemical additives for oils and fuels. 40 - Production of energy; recycling; production, treatment and refinement of microorganisms and bacteria; production, treatment and refinement of fuels; production, treatment and refinement of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	4107711

Country	Mark	Class – Goods/Services	Status	Number
US		01 - Chemicals used in industry; industrial chemicals, namely, 2,3 butanediol, isoprene, methyl ethyl ketone, i-butanol, isopropanol, acetone, succinic acid, acrylic acid, 2-butanol, biodiesel and fatty acid ethyl ester; chemical additives for fuels and lubricants; bacteria for use in fermentation processes; bacterial substances for industrial and scientific use, namely, bacterial substances and preparations, namely, bacteria for use in fermentation processes; preparations and cultures for microorganisms, namely, anaerobic preparations and cultures for use in fermentation processes. 04 - Alcohols, namely, alcohol and mixed alcohol fuel; alcohol for fuel manufacture, namely, fuels with an alcoholic base; ethyl fuels; gaseous fuels; liquid fuels; solid fuels; smokeless fuels; liquid bio-fuels; gaseous bio-fuels; solid bio-fuels; smokeless bio-fuels; bio-diesel fuels; non chemical additives for oils and fuels 40 - Production of energy; recycling; production, treatment and refinement of microorganisms and bacteria; production, treatment and refinement of fuels; production, treatment and refinement of fuels using carbon monoxide component of waste flue gases as a feed.	Registered	4107712
US	CAPTURING CARBON. FUELING GROWTH.	40 - Production of energy; recycling; production, treatment and refinement of microorganisms and bacteria; production, treatment and refinement of fuels; production, treatment and refinement of fuels using carbon monoxide component of waste flue gases as a feed.	Accepted	85/724538
US	LanzaTech	04 - Ethanol fuels.	Registered	4222152
US	LanzaTech	04 - Ethanol fuels.	Registered	4222154
US	FREEDOM PINES	40 - Production, treatment and refinement of fuels	Registered	4964787
US	Freedom Pines Biorefinery	40 - Production, treatment and refinement of fuels	Registered	4968988
US		40 - Production, treatment and refinement of fuels	Registered	4968989

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Country	Mark	Class – Goods/Services	Status	Number
US	LanzaTech	40 - Production of energy; recycling	Registered	4222155
US	LanzaTech	40 - Production of energy; recycling	Registered	4222153
US	LanzaTech AGES	Goods: Testing kits for use in analyzing gases Services: Gas testing services	Pending	86/407706
US	AGES	Goods: Testing kits for use in analyzing gases Services: Gas testing services	Pending	86/407698