PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7550005

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the RECEVING PARTY NAME previously recorded on Reel 061121 Frame 0088. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date	
IOWA CORN PROMOTION BOARD	01/21/2022	

RECEIVING PARTY DATA

Name:	T.EN PROCESS TECHNOLOGY, INC.			
Street Address:	11720 KATY FREEWAY			
City:	HOUSTON			
State/Country:	TEXAS			
Postal Code:	77079			

PROPERTY NUMBERS Total: 19

Property Type	Number
Application Number:	62345399
Application Number:	62000087
Application Number:	62904854
Application Number:	62905068
Patent Number:	11319269
Application Number:	17735813
Application Number:	17579196
Application Number:	17378340
Application Number:	17031675
Patent Number:	11319268
Application Number:	17031009
Patent Number:	9399610
Patent Number:	10975010
Patent Number:	10988426
Patent Number:	10472310
Patent Number:	9783472
Patent Number:	10544072
Application Number:	63300696
Application Number:	17031510

PATENT

REEL: 061497 FRAME: 0258

507503114

CORRESPONDENCE DATA

Fax Number:

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.

Email: patty.law@dentons.com
Correspondent Name: MATTHEW CORYELL
Address Line 1: 215 10TH STREET

Address Line 4: DES MOINES, IOWA 50309

NAME OF SUBMITTER:	MATTHEW CORYELL
SIGNATURE:	/Matthew Coryell/
DATE SIGNED:	09/21/2022

Total Attachments: 20

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
IOWA CORN PROMOTION BOARD	01/21/2022

RECEIVING PARTY DATA

	T.EN STONE & WEBSTER PROCESS TECHNOLOGY, INC.
Street Address:	11720 KATY FREEWAY
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77079

PROPERTY NUMBERS Total: 19

Property Type	Number				
Application Number:	62345399				
Application Number:	62000087				
Application Number:	62904854				
Application Number:	62905068				
Application Number:	63300696				
Patent Number:	11319269				
Application Number:	17735813				
Application Number:	17579196				
Application Number:	17378340				
Application Number:	17031675				
Application Number:	17031510				
Patent Number:	11319268				
Application Number:	17031009				
Patent Number:	9399610				
Patent Number:	10975010				
Patent Number:	10988426				
Patent Number:	10472310 PATENT				

REEL: 061497 FRAME: 0260

Patent Number:	9783472	
Patent Number:	10544072	

CORRESPONDENCE DATA

Fax Number: (515)243-0654
Email: patty.law@dentons.com

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.

Correspondent Name: MATTHEW CORYELL
Address Line 1: 215 10TH STREET
Address Line 2: SUITE 1300

Address Line 4: DES MOINES, IOWA 50309

ATTORNEY DOCKET NUMBER:	
NAME OF SUBMITTER:	MATTHEW CORYELL
Signature:	/Matthew Coryell/
Date:	09/16/2022

Total Attachments: 18

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RECEIPT INFORMATION

EPAS ID: PAT7542514 **Receipt Date:** 09/16/2022

FIRST AMENDMENT TO ASSET PURCHASE AGREEMENT BETWEEN T.EN STONE & WEBSTER PROCESS TECHNOLOGY, INC. AND IOWA CORN PROMOTION BOARD

This First Amendment ("Amendment") to the Asset Purchase Agreement dated January 21, 2022 ("Agreement") between Iowa Corn Promotion Board ("ICPB") and T.EN Stone & Webster Process Technology, Inc. ("T.EN") shall be effective as of January 21, 2022.

WHEREAS, effective on the Asset Transfer Date as defined in the Agreement, T.EN purchased from ICPB all of ICPB's right, title and interest in, to an under all of the Glycol Technology Assets as defined in the Agreement.

WHEREAS, the purchased Glycol Technology Assets included certain patents and patent applications identified in Schedule 1 to the Agreement (the "Assigned Patents").

WHEREAS, at the Closing as defined in the Agreement, ICPB delivered to T.EN a duly executed patent assignment agreement dated January 21, 2022 (Appendix B of the Agreement) whereby ICPB conveyed, transferred, and assigned to T.EN all of its right, title and interest in the Assigned Patents and T.EN delivered to ICPB a duly executed security agreement granting ICPB a security interest in the Assigned Patents (Appendix E of the Agreement).

WHEREAS, T.EN desires to have all Assigned Patents conveyed, transferred, and assigned to T.EN Process Technology, Inc., a subsidiary company wholly owned by T.EN, which T.EN established for purposes of holding intellectual property assets and ICPB has agreed to amend the Agreement to help facilitate this desire.

NOW THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties agree as follows:

- 1. Appendix B to the Agreement shall be deleted in its entirety and replaced with the attached revised Appendix B whereby the term "Buyer" is replaced with the term "Assignee". The Assignee shall be T.EN Process Technology, Inc.
- 2. Appendix E to the Agreement shall be deleted in its entirety and replaced with the attached revised Appendix E wherein the Grantor is T.EN Process Technology, Inc.
- 3. For avoidance of doubt, the original executed patent assignment agreement and security agreement attached to the Agreement in Appendix B and Appendix E prior to this Amendment are void ab initio and replaced by the attached new Appendix B and Appendix E.

Except as expressly modified by this Amendment, all other terms of the Agreement shall remain in full force and effect. This Amendment may be executed in two (2) counterparts, but such counterparts together shall constitute one and the same instrument.

[SIGNATURE PAGE FOLLOWS]

T.EN Stone & Webster Process Technology, Inc.	Iowa Corn Promotion Board
By: Docubiqued by:	By: Crain Floss
Name: Bhaskar Patel	Name: Craig Floss
Titla: Precident	Title: Chief Evecutive Officer

APPENDIX B

PATENT ASSIGNMENT AGREEMENT

This PATENT ASSIGNMENT AGREEMENT ("Patent Assignment"), dated as of January 21, 2022, is made by Iowa Corn Promotion Board, an Iowa corporation, located at 5505 NW 88th Street, Johnston, Iowa 50131-2948 ("Seller"), in favor of T.EN Process Technology, Inc., a Delaware corporation, located at 11720 Katy Freeway, Houston, Texas 77079 ("Assignee"), the purchaser of certain assets of Seller pursuant to a Asset Purchase Agreement between Assignee and Seller dated as of January 21, 2022 (the "APA").

WHEREAS, under the terms of the APA, Seller has conveyed, transferred, and assigned to Assignee, among other assets, certain intellectual property of Seller, and has agreed to execute and deliver this Patent Assignment, for recording with the United States Patent and Trademark Office and corresponding entities or agencies in any applicable jurisdictions;

NOW THEREFORE, the parties agree as follows:

- 1. <u>Assignment</u>. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Seller hereby irrevocably conveys, transfers, and assigns to Assignee, and Assignee hereby accepts, all of Seller's right, title, and interest in and to the following (the "Assigned Patents"):
 - (a) the patents and patent application set forth in Schedule 1 hereto and all issuances, divisions, continuations, continuations-in-part, reissues, extensions, reexaminations, and renewals thereof (the "Patents");
 - (b) all rights of any kind whatsoever of Seller accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions, and otherwise throughout the world;
 - (c) any and all royalties, fees, income, payments, and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and
 - (d) any and all claims and causes of action with respect to any of the foregoing, whether accruing before, on, or after the date hereof, including all rights to and claims for damages, restitution, and injunctive and other legal and equitable relief for past, present, and future infringement, misappropriation, violation, misuse, breach, or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.
- 2. Recordation and Further Actions. Seller hereby authorizes the Commissioner for Patents in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this Patent Assignment upon request by Assignee. Following the date hereof, upon Assignee's reasonable request, Seller shall take such steps and actions, and provide such cooperation and assistance to Assignee and its successors, assigns, and legal representatives, including the execution and delivery of any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents, as

may be necessary to effect, evidence, or perfect the assignment of the Assigned Patents to Assignee, or any assignee or successor thereto.

- 3. Terms of the APA. The parties hereto acknowledge and agree that this Patent Assignment is entered into pursuant to the APA, to which reference is made for a further statement of the rights and obligations of Seller and Assignee with respect to the Assigned Patents. The representations, warranties, covenants, agreements, and indemnities contained in the APA shall not be superseded hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the APA and the terms hereof, the terms of the APA shall govern.
- 4. <u>Counterparts</u>. This Patent Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed one and the same agreement. A signed copy of this Patent Assignment delivered by facsimile, e-mail, or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Patent Assignment.
- 5. <u>Successors and Assigns</u>. This Patent Assignment shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.
- 6. <u>Governing Law.</u> This Patent Assignment and any claim, controversy, dispute, or cause of action (whether in contract, tort, or otherwise) based upon, arising out of, or relating to this Patent Assignment and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

[SIGNATURE PAGE FOLLOWS]

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IN WITNESS WHEREOF, Seller has duly executed and delivered this Patent Assignment as of the date first above written.

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By Crain Floss

Name: Craig Floss

Title: Chief Executive Officer

Address for Notices: 5505 NW 88th Street Johnston, IA 50131-2948

AGREED TO AND ACCEPTED:

T.EN PROCESS TECHNOLOGY, INC.

By Coessesses 1989
Name: Bhaskar Patel

Title: President

Address for Notices:

11720 Katy Freeway Houston, TX 77079

REEL: 061497 FRAME: 0266

SCHEDULE 1

ASSIGNED PATENTS AND PATENT APPLICATIONS

Patents

Title	Jurisdiction	Patent Number	Issue Date
Process for the continuous production of ethylene glycol from carbohydrates	US	9,399,610	07/26/2016
Process for the continuous production of ethylene glycol from carbohydrates	US	9,783,472	10/10/2017
Process for the continuous production of ethylene glycol from carbohydrates	Singapore	11201609633P	3/27/2018
Process for the continuous production of ethylene glycol from carbohydrates	India	356443	1/22/2021
Process for the continuous production of ethylene glycol from carbohydrates	EPO	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Denmark	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	France	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Germany	602015014932.7	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Netherlands	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Brazil	BR112016026936-5	10/13/2021
Process for the continuous production of ethylene glycol from carbohydrates	Canada	2,949.512	8/18/2020
Process for the continuous production of ethylene glycol from carbohydrates	Japan	6502386	3/29/2019

Process for the continuous production of ethylene glycol from carbohydrates	China	201580026319.4	12/28/2018
Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	US	10,544,072	1/28/2020
Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	US	10,988,426	4/27/2021
Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	US	10,975,010	4/13/2021

Patent Applications

Title	Jurisdiction	Status	Application/ Publication Number	Filing Date
Process for the continuous production of ethylene glycol from carbohydrates	WIPO	Done	WO 2015/179302	05/18/2015
Process for the continuous production of ethylene glycol from carbohydrates	Malaysia	Allowed	PI 2016704246	1117/2016
Process for the continuous production of ethylene glycol from carbohydrates	Korea	Pending	10-2016-7035349	12/16/2016
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	WIPO	Done	WO 2017/210614	6/3/2017
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Brazil	Pending	BR 1120180749044	11/30/2018
Continuous processes for the highly selective	Canada	Pending	3,026,268	11/30/2018

conversion of aldohexose- yielding carbohydrate to				
ethylene glycol Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	China	Pending	201780045893.3	1/24/2019
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	EPO	Pending	17807607.1	11/30/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Japan	Pending	2018-562953	11/30/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Korea	Pending	10-2019-7000088	1/2/2019
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Malaysia	Pending	PI 2018002246	11/29/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Singapore	Pending	11201810730Q	11/29/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Taiwan	Pending	106118431	6/3/2017
Methods for operating continuous, unmodulated, multiple catalytic step processes	US	Pending	17/031,009 20210087127	9/24/2020
Methods for operating continuous, unmodulated, multiple catalytic step processes	WIPO	Pending	PCT/US20/52474 WO 2021/061969	9/24/2020

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Continuous, carbohydrate to ethylene glycol processes	US	Allowed	17/031,280 20210087125	9/24/2020
Continuous, carbohydrate to ethylene glycol processes	WIPO	Pending	PCT/US20/52519 WO 2021/062008	9/24/2020
Process with integrated recycle for making ethylene glycol and/or propylene glycol from aldose- and/or ketose- yielding carbohydrates	US	Pending	17/031,510 20210087128	9/24/2020
Process for making ethylene glycol and/or propylene glycol from aldose- and/or ketose-yielding carbohydrates with ex situ hydrogenolysis or hydrogenation catalyst treatment	US	Pending	17/031,675 20210087129	9/24/2020
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	US	Allowed	17/031,701	9/24/2020
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	US	Pending	17/378,340	7/16/2021
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	WIPO	Pending	PCT/US20/52579	9/24/2020
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	US	Pending	17/579,196	01/19/2022

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APPENDIX E

SECURITY AGREEMENT

This SECURITY AGREEMENT ("Security Agreement"), dated as of January 21, 2022, is made by and T.EN Process Technology, Inc., a Delaware corporation (the "Grantor") in favor of Iowa Corn Promotion Board, an Iowa corporation (the "Secured Party").

WHEREAS, on the date hereof, the Secured Party has sold to the Grantor all of the Secured Party's right, title, and interest in, to, and under all of the Glycol Technology Assets, evidenced by the Asset Purchase Agreement dated as of January 21, 2022, between the Secured Party and the Grantor (as amended, supplemented, or otherwise modified from time to time, the "APA");

WHEREAS, on the date hereof, the Grantor agreed to pay to the Secured Party (i) a non-refundable up-front payment in the amount of Two Million United States dollars (US\$2,000,000) due on the Asset Transfer Date and (ii) non-refundable installment payments during the Installment Payment Period, evidenced by the APA; and

WHEREAS, under the terms of the APA, the Grantor agreed to grant to the Secured Party a security interest in the Glycol Technology Assets, and has agreed to execute and deliver this Security Agreement for recording with the United States Patent and Trademark Office or other government authority as may be necessary to properly perfect a security interest in the Glycol Technology Assets.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

- 1. <u>Grant of Security</u>. The Grantor hereby pledges and grants to the Secured Party a security interest in and to all of the right, title, and interest of the Grantor in, to, and under the following (the "<u>Collateral</u>"):
 - (a) the patents and patent applications set forth in Schedule I hereto and all reissues, divisions, continuations, continuations-in-part, renewals, extensions, and reexaminations thereof and amendments thereto (the "Patents");
 - (b) other Glycol Technology Assets as more fully described in the APA;
 - (c) all rights of any kind whatsoever of the Grantor accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions, and otherwise throughout the world; and
 - (d) any and all claims and causes of action, with respect to any of the foregoing, whether occurring before, on, or after the date hereof, including all rights to and claims for damages, restitution, and injunctive and other legal and equitable relief for past, present, and future infringement, misappropriation, violation, misuse, breach, or default, with the right, but no obligation, to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

- 2. <u>Recordation</u>. The Grantor authorizes the Commissioner for Patents and any other government officials to record and register this Security Agreement upon request by the Secured Party.
- 3. <u>Transaction Documents</u>. This Security Agreement has been entered into pursuant to and in conjunction with the APA. The provisions of the APA shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of the Secured Party with respect to the Collateral are as provided by the APA and this Security Agreement.
- 4. <u>Release of Security Interest.</u> The Secured Party shall immediately release any security interest it may file or perfect in the Collateral at the earlier of end of the Installment Payment Period or Grantors reversion of Collateral to Secured Party in accordance with the terms of the APA. To ensure the proper recordation and notice of such release, Secured Party shall file such release with any appropriate governmental authorities as Grantor may reasonably request.
- 5. <u>Execution in Counterparts</u>. This Security Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Security Agreement by facsimile or in electronic (i.e., "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart of this Security Agreement.
- 6. <u>Successors and Assigns</u>. This Security Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and assigns.
- 7. <u>Governing Law</u>. This Security Agreement and any claim, controversy, dispute, or cause of action (whether in contract or tort or otherwise) based upon, arising out of, or relating to this Security Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Grantor has caused this Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

T.EN Process Technology, Inc., as Grantor

By: Control Discourse Data

Name: Bhaskar Patel Title: President

IOWA CORN PROMOTION BOARD, as Secured Party

By (rain Floss

Name: Craig Floss

Title: Chief Executive Officer

SCHEDULE I

PATENTS

Patents

Title	Jurisdiction	Patent Number	Issue Date
Process for the continuous production of ethylene glycol from carbohydrates	US	9,399,610	07/26/2016
Process for the continuous production of ethylene glycol from carbohydrates	US	9,783,472	10/10/2017
Process for the continuous production of ethylene glycol from carbohydrates	Singapore	11201609633P	3/27/2018
Process for the continuous production of ethylene glycol from carbohydrates	India	356443	1/22/2021
Process for the continuous production of ethylene glycol from carbohydrates	EPO	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Denmark	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	France	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Germany	602015014932.7	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Netherlands	3145902	8/15/2018
Process for the continuous production of ethylene glycol from carbohydrates	Brazil	BR112016026936-5	10/13/2021
Process for the continuous production of ethylene glycol from carbohydrates	Canada	2,949.512	8/18/2020
Process for the continuous production of ethylene glycol from carbohydrates	Japan	6502386	3/29/2019

Process for the continuous production of ethylene glycol from carbohydrates	China	201580026319.4	12/28/2018
Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	US	10,544,072	1/28/2020
Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	US	10,988,426	4/27/2021
Continuous processes for the highly selective conversion of aldohexose-yielding carbohydrate to ethylene glycol	US	10,975,010	4/13/2021

Patent Applications

Title	Jurisdiction	Status	Application/ Publication Number	Filing Date
Process for the continuous production of ethylene glycol from carbohydrates	WIPO	Done	WO 2015/179302	05/18/2015
Process for the continuous production of ethylene glycol from carbohydrates	Malaysia	Allowed	PI 2016704246	1117/2016
Process for the continuous production of ethylene glycol from carbohydrates	Korea	Pending	10-2016-7035349	12/16/2016
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	WIPO	Done	WO 2017/210614	6/3/2017
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Brazil	Pending	BR 1120180749044	11/30/2018
Continuous processes for the highly selective conversion of aldohexose-	Canada	Pending	3,026,268	11/30/2018

yielding carbohydrate to ethylene glycol				
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	China	Pending	201780045893.3	1/24/2019
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	EPO	Pending	17807607.1	11/30/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Japan	Pending	2018-562953	11/30/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Korea	Pending	10-2019-7000088	1/2/2019
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Malaysia	Pending	PI 2018002246	11/29/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Singapore	Pending	11201810730Q	11/29/2018
Continuous processes for the highly selective conversion of aldohexose- yielding carbohydrate to ethylene glycol	Taiwan	Pending	106118431	6/3/2017
Methods for operating continuous, unmodulated, multiple catalytic step processes	US	Pending	17/031,009 20210087127	9/24/2020
Methods for operating continuous, unmodulated, multiple catalytic step processes	WIPO	Pending	PCT/US20/52474 WO 2021/061969	9/24/2020
Continuous, carbohydrate to	US	Allowed	17/031,280	9/24/2020

ethylene glycol processes			20210087125	
Continuous, carbohydrate to ethylene glycol processes	WIPO	Pending	PCT/US20/52519 WO 2021/062008	9/24/2020
Process with integrated recycle for making ethylene glycol and/or propylene glycol from aldose- and/or ketose- yielding carbohydrates	US	Pending	17/031,510 20210087128	9/24/2020
Process for making ethylene glycol and/or propylene glycol from aldose- and/or ketose-yielding carbohydrates with ex situ hydrogenolysis or hydrogenation catalyst treatment	US	Pending	17/031,675 20210087129	9/24/2020
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	US	Allowed	17/031,701	9/24/2020
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	US	Pending	17/378,340	7/16/2021
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	WIPO	Pending	PCT/US20/52579	9/24/2020
Continuous processes for the selective conversion of aldohexose-yielding carbohydrate to ethylene glycol using low concentrations of retro- aldol catalyst	US	Pending	17/579,196	01/19/2022
Ion Exclusion	US	Pending	63/300,696	01/19/2022

RECORDED: 09/21/2022