## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7472527

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	RELEASE OF SECURITY INTEREST

## **CONVEYING PARTY DATA**

Name	Execution Date	
TRUIST BANK	08/05/2022	

## **RECEIVING PARTY DATA**

Name:	NOVOMER, INC.
Street Address:	140 INDUSTRIAL BOULEVARD
City:	BAINBRIDGE
State/Country:	GEORGIA
Postal Code:	39817

## **PROPERTY NUMBERS Total: 82**

Property Type	Number
Patent Number:	10703702
Application Number:	16739733
Patent Number:	9327280
Patent Number:	10221278
Patent Number:	10479861
Patent Number:	9156803
Patent Number:	8445703
Patent Number:	8796475
Patent Number:	9206144
Patent Number:	9493391
Patent Number:	9096510
Patent Number:	9914689
Patent Number:	9403788
Patent Number:	10245559
Application Number:	16283257
Patent Number:	10858329
Application Number:	16919763
Patent Number:	10597294
Patent Number:	10829372
Patent Number:	10974234

PATENT REEL: 061088 FRAME: 0116

507425598

Property Type	Number
Application Number:	17192452
Patent Number:	10428165
Patent Number:	10822436
Application Number:	17085525
Application Number:	16890056
Patent Number:	10683390
Application Number:	16881403
Patent Number:	10099988
Patent Number:	10626073
Application Number:	16854092
Patent Number:	10221150
Patent Number:	10738022
Patent Number:	10927091
Application Number:	16851517
Patent Number:	10662283
Patent Number:	10099989
Patent Number:	10717695
Application Number:	16932338
Patent Number:	10252969
Application Number:	16453775
Patent Number:	9719037
Patent Number:	9718755
Patent Number:	10711095
Patent Number:	10662139
Application Number:	17054811
Application Number:	17152248
Application Number:	16479530
Application Number:	16346856
Application Number:	16346853
Application Number:	16494635
Application Number:	16981437
Patent Number:	10676426
Patent Number:	10899622
Application Number:	16970736
Application Number:	17266230
Patent Number:	8575245
Patent Number:	8748555
Patent Number:	9738784

Property Type	Number
Patent Number:	9738760
Patent Number:	10144802
Patent Number:	10669373
Application Number:	16869080
Patent Number:	10500104
Patent Number:	10065914
Patent Number:	10457624
Patent Number:	10781156
Application Number:	16995358
Patent Number:	10590099
Patent Number:	10961209
Application Number:	16753591
Application Number:	17054808
Application Number:	17257984
Application Number:	63066451
Application Number:	63143348
Application Number:	63155346
Application Number:	63154014
Application Number:	63175667
Application Number:	63175736
Application Number:	63171150
Application Number:	63171152
Application Number:	63220126
Application Number:	63224137

### **CORRESPONDENCE DATA**

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Address Line 4: ATLANTA, GEORGIA 30308

NAME OF SUBMITTER:	/KATHLEENCURREY		
SIGNATURE:	/KathleenCurrey/		
DATE SIGNED:	08/05/2022		
	This document serves as an Oath/Declaration (37 CFR 1.63).		

**Total Attachments: 13** 

source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page1.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page2.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page3.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page4.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page5.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page7.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page7.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page8.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page10.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page11.tif source=02. Release of Security Interest in Patents - Reel 058922 Frame 0803 (Danimer)(9564126.2)#page13.tif

#### **RELEASE OF SECURITY INTEREST IN PATENTS**

August 5, 2022

FOR VALUE RECEIVED, the undersigned, **TRUIST BANK**, a North Carolina banking corporation, having an address at 3333 Peachtree Road, Atlanta, Georgia 30326 ("Lender"), hereby releases and terminates all of Lender's liens and security interests in and to all Patent Collateral of **NOVOMER**, **INC.**, a Delaware corporation ("Company"), having its principal place of business at 140 Industrial Boulevard, Bainbridge, Georgia 39817, including, without limitation, all such patents and patent applications listed on Exhibit A attached hereto, and Lender hereby reassigns all right, title and interest (if any) that Lender may have in the Patent Collateral to Company, without any representation or warranty by, or recourse to, Lender, arising under that certain Patent Security Agreement between Lender and Company dated as of January 28, 2022, as recorded in the United States Patent and Trademark Office on February 1, 2022, at Reel 058922 Frame 0803 (the "Patent Security Agreement"). Capitalized terms used herein, unless otherwise defined herein, shall have the meanings ascribed to such terms in the Patent Security Agreement.

This Release of Security Interest in Patents (this "Release") is intended to operate as a release of all liens and security interests granted and conveyed by Company to Lender pursuant to the terms of the Patent Security Agreement and to reassign to Company all of Lender's right, title, and interest, if any, acquired pursuant to the terms of such Patent Security Agreement, in each case without any representation, warranty, recourse or undertaking by Lender.

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IN WITNESS WHEREOF, Lender has caused this Release to be signed by its duly authorized officer on the date first written above.

TRUIST BANK

By: Corte-lenoire
Title: Director

# EXHIBIT A

## **Patents and Patent Licenses**

## U.S. Patents

Patent	Application	Registration
	Number	Number (if applicable)
PRODUCTION SYSTEM/PRODUCTION PROCESS FOR	15/223.178	10.703.702
ACRYLIC ACID AND PRECURSORS THEREOF		
Production System/Production Process for Acrylic Acid and	16/739,733	
Precursors Thereof	·	
CATALYTIC CARBONYLATION CATALYSTS AND METHODS	14/117,393	9,327,280
CATALYTIC CARBONYLATION CATALYSTS AND METHODS	15/130,810	10,221,278
CATALYTIC CARBONYLATION CATALYSTS AND METHODS	16/279,539	10,479,861
SUCCINIC ANHYDRIDE FROM ETHYLENE OXIDE	13/819,969	9,156,803
PROCESS FOR BETA/LACTONE PRODUCTION	13/262,985	8,445,703
PROCESS FOR BETA/LACTONE PRODUCTION	13/860,179	8,796,475
PROCESS FOR BETA/LACTONE PRODUCTION	14/275,139	9,206,144
PROCESS FOR BETA/LACTONE PRODUCTION	14/857,313	9,493,391
PROCESS FOR PRODUCTION OF ACRYLATES FROM EPOXIDES	14/353,532	9,096,510
PROCESS FOR PRODUCTION OF ACRYLATES FROM	15/291,011	9,914,689
EPOXIDES	***************************************	
PROCESS FOR THE PRODUCTION OF ACID ANHYDRIDES FROM EPOXIDES	14/378,290	9,403,788
NANOFILTRATION MEMBRANES AND METHODS OF USE	15/176,110	10,245,559
NANOFILTRATION MEMBRANES AND METHODS OF USE	16/283,257	
CATALYST RECYCLE METHODS	15/308,989	10,858,329
Catalyst Recycle Methods	16/919,763	
INTEGRATED METHODS FOR CHEMICAL SYNTHESIS	15/314,429	10,597,294
INTEGRATED METHODS FOR CHEMICAL SYNTHESIS	16/787,510	10,829,372
SYNTHESIS OF METAL COMPLEXES AND USES THEREOF	16/054,904	10,974,234
SYNTHESIS OF METAL COMPLEXES AND USES THEREOF	17/192,452	
SYSTEMS AND PROCESSES FOR POLYACRYLIC ACID	15/550,111	10,428,165
PRODUCTION		
SYSTEMS AND PROCESSES FOR POLYACRYLIC ACID	16/534,930	10.822,436
PRODUCTION		
SYSTEMS AND PROCESSES FOR POLYACRYLIC ACID	17/085,525	
PRODUCTION		
FLEXIBLE CHEMICAL PRODUCTION PLATFORM	16/890,056	
SYSTEMS AND PROCESSES FOR POLYMER PRODUCTION	15/550,161	10,683,390
SYSTEMS AND PROCESSES FOR POLYMER PRODUCTION	16/881,403	
PROCESS FOR PRODUCTION OF ACRYLIC ACID	15/550,193	10,099,988
PROCESS FOR PRODUCTION OF ACRYLIC ACID	16/107,858	10,626,073
PROCESS FOR PRODUCTION OF ACRYLIC ACID	16/854,092	
IMPROVEMENTS TO CONTINUOUS CARBONYLATION PROCESSES	15/550,217	10,221,150

Patent	Application	Registration
	Number	Number (if applicable)
IMPROVEMENTS TO CONTINUOUS CARBONYLATION	16/248,509	10,738,022
PROCESSES		
CONTINUOUS CARBONYLATION PROCESSES	16/919,644	10,927,091
PROCESS FOR PRODUCTION OF POLYPROPIOLACTONE	15/550,234	10,662,283
PROCESS AND SYSTEM FOR PRODUCTION OF POLYPROPIOLACTONE	16/851,517	
DISTILLATION PROCESS FOR PRODUCTION OF ACRYLIC ACID	15/550,243	10,099,989
DISTILLATION PROCESS FOR PRODUCTION OF ACRYLIC ACID	16/107,881	10.717.695
DISTILLATION PROCESS FOR PRODUCTION OF ACRYLIC ACID	16/932,338	
METHOD FOR PRODUCTION OF AROMATIC	15/809,612	10.252,969
DICARBOXYLIC ACIDS AND DERIVATIVE THEREOF		
INTEGRATED METHODS FOR CHEMICAL SYNTHESIS	16/453,775	
METHODS FOR PRODUCTION OF TEREPHTHALIC ACID FROM ETHYLENE OXIDE	15/197.838	9.719.037
METHOD FOR COPRODUCTION OF TEREPHTHALIC ACID AND SYTRENE FROM ETHYLENE OXIDE	15/199,047	9,718,755
REACTIVE DISTILLATION TO PRODUCE SUPERABSORBENT POLYMERS	16/087.042	10.711.095
ACRYLIC ACID PRODUCTION USING ZEOLITES	15/464,346	10,662,139
SYSTEMS AND PROCESSES FOR PRODUCING ORGANIC ACIDS DIRECTLY FROM BETA-LACTONES	17/054,811	10,002,133
ACRYLIC ACID, AND METHODS OF PRODUCING THEREOF	17/152,248	
SYSTEMS AND PROCESSES FOR ETHYLENE OXIDE SUPPLY	16/479,530	
ABSORBENT POLYMERS, AND METHODS OF PRODUCING THEREOF AND USES THEREOF	16/346,856	
ABSORBENT POLYMERS, AND METHODS OF PRODUCING	16/346,853	
THEREOF AND USES THEREOF		
POLYAMIDES, AND METHODS OF PRODUCING THEREOF	16/494,635	
SULFUR- AND PHOSPHORUS-CONTAINING POLYMERS, AND METHODS OF PRODUCING THEREOF	16/981,437	
ACRYLONITRILE COMPOUNDS AND OTHER NITRILE	16/023,136	10,676,426
COMPOUNDS, AND METHODS OF PRODUCING AND USING THEREOF		
ACRYLONITRILE COMPOUNDS AND OTHER NITRILE	15/950,850	10,899,622
COMPOUNDS, AND METHODS OF PRODUCING AND USING THEREOF		
POLYPROPIOLACTONE FILMS, AND METHODS OF PRODUCING THEREOF	16/970,736	
METAL-ORGANIC FRAMEWORK CATALYSTS, AND USES THEREOF	17/266,230	
TUNABLE POLYMER COMPOSITIONS	13/141,532	8,575,245
STRUCTURALLY PRECISE POLY (PROPYLENE CARBONATE)	13/380,212	8,748,555
COMPOSITIONS		
POLYMER BLENDS	13/878,582	9,738,784

Patent	Application Number	Registration Number (if applicable)
ALIPHATIC POLYCARBONATE COMPOSITIONS AND METHODS	14/888,409	9,738,760
BETA/PROPIOLACTONE BASED COPOLYMERS CONTAINING BIOGENIC CARBON, METHODS FOR THEIR	15/369,764	10,144,802
PRODUCTION AND USES THEREOF BETA/PROPIOLACTONE BASED COPOLYMERS CONTAINING BIOGENIC CARBON, METHODS FOR THEIR	16/178,214	10,669,373
PRODUCTION AND USES THEREOF BETA-PROPIOLACTONE BASED COPOLYMERS	16/869,080	
CONTAINING BIOGENIC CARBON, METHODS FOR THEIR PRODUCTION AND USES THEREOF		
BIODEGRADABLE SANITARY ARTICLES WITH HIGHER BIOBASED CONTENT SYSTEMS AND PROCESSES FOR THERMOLYSIS OF	15/369,886 15/494,805	10,500,104
POLYLACTONES TO PRODUCE ORGANIC ACIDS SYSTEMS AND PROCESSES FOR THERMOLYSIS OF	15/612.884	10,065,914
POLYLACTONES TO PRODUCE ORGANIC ACIDS BIODEGRADABLE SANITARY ARTICLES WITH HIGHER	16/023,612	10,781,156
BIOBASED CONTENT Compositions for Improved Production of Acrylic Acid	16/995,358	10.700
PROCESSES FOR PRODUCING BETA/LACTONE WITH HETEROGENOUS CATALYSTS PROCESSES FOR PRODUCING BETA/LACTONE WITH	15/674,453 16/057,530	10,590,099 10,961,209
HETEROGENOUS CATALYSTS ISOCYANATES, DERIVATIVES, AND PROCESSES FOR	16/753,591	10,701,207
PRODUCING THE SAME STABILIZING POLYPROPIOLACTONE BY END-	17/054,808	
CAPPINGWITH END-CAPPING AGENTS POLYLACTONE FOAMS AND METHODS OF MAKING THE	17/257,984	
SAME Beta-Lactones for Use in Coatings Bubble Column Carbonylation	63/066.451 63/143,348	
Catalyst Recycle Method for Production of Beta-Propiolactones  Zwitterion Catalysts for Polymerization of Beta-Propiolactones	63/155,346 63/154,014	
Quaternary Ammonium Carboxylate Salts as Initiators for Beta- Propiolactone Polymerization	63/175,667	
Process for Carbonylation using a Continuously Stirred Reactor Novel Schiff Base Carbonylation Catalyst Compositions based on	63/175,736 63/171,150	
Bipyridine and Phenanthroline Synthesis of Tetraphenylporphyrin Using Peroxides	63/171,152	
Sterically Modified Schiff Base Ligands for Enhanced Catalytic Carbonylation Activity METHODS FOR PRODUCTION OF BIODEGRADABLE	63/220,126 63/224,137	
POLYESTERS	03/224,137	

# **Foreign Patents**

Patent	Jurisdiction	Application Number	Registratio n Number (if applicable)
PRODUCTION SYSTEM/PRODUCTION PROCESS FOR ACRYLIC ACID AND PRECURSORS THEREOF	CN	201680055982.1	cy group cy
PRODUCTION SYSTEM/PRODUCTION PROCESS FOR ACRYLIC ACID AND PRECURSORS THEREOF	JP	2018-505014	
PRODUCTION SYSTEM/PRODUCTION PROCESS FOR ACRYLIC ACID AND PRECURSORS THEREOF	SA	518390849	
CATALYTIC CARBONYLATION CATALYSTS AND METHODS	DE	12786675.4	2707353
CATALYTIC CARBONYLATION CATALYSTS AND METHODS CATALYTIC CARBONYLATION CATALYSTS	EP FR	12786675.4 12786675.4	2707353 2707353
AND METHODS CATALYTIC CARBONYLATION CATALYSTS AND METHODS	GB	12786675.4	2707353
CATALYTIC CARBONYLATIC CATALYSTS AND METHODS	EP	21156382.0	
SUCCINIC ANHYDRIDE FROM ETHYLENE OXIDE SUCCINIC ANHYDRIDE FROM ETHYLENE	CN WO	201180047249.2 PCT/US2011/04912	ZL2011800 47249.2
OXIDE PROCESS FOR BETA/LACTONE	CN	5 201080020317.1	ZL2010800
PRODUCTION PROCESS FOR BETA/LACTONE PRODUCTION	JP	2012-504822	20317.1 5937001
PROCESS FOR PRODUCTION OF ACRYLATES FROM EPOXIDES PROCESS FOR PRODUCTION OF	CN DE	201280061231.2 12842768.9	ZL2012800 612312 2771307
ACRYLATES FROM EPOXIDES PROCESS FOR PRODUCTION OF	EP	12842768.9	2771307
ACRYLATES FROM EPOXIDES PROCESS FOR PRODUCTION OF ACRYLATES FROM EPOXIDES	FR	12842768.9	2771307
PROCESS FOR PRODUCTION OF ACRYLATES FROM EPOXIDES PROCESS FOR PRODUCTION OF	GB GC	12842768.9 22598	2771307 6330
ACRYLATES FROM EPOXIDES PROCESS FOR PRODUCTION OF	IN	3810/CHENP/2014	342473
ACRYLATES FROM EPOXIDES PROCESS FOR PRODUCTION OF ACRYLATES FROM EPOXIDES	JP	2014-538976	6219834
PROCESS FOR PRODUCTION OF ACRYLATES FROM EPOXIDES	KR	10-2014-7013829	1894709

Patent	Jurisdiction	Application Number	Registratio
			n Number
			(if applicable)
PROCESS FOR PRODUCTION OF	GC	2012/34150	9074
ACRYLATES FROM EPOXIDES		2012/31130	) , ,
PROCESS FOR PRODUCTION OF	CN	201710361942.6	ZL2017103
ACRYLATES FROM EPOXIDES			61942.6
PROCESS FOR PRODUCTION OF	EP	18168238.6	
ACRYLATES FROM EPOXIDES			
PROCESS FOR PRODUCTION OF	GC	2012/34150	9074
ACRYLATES FROM EPOXIDES			
PROCESS FOR PRODUCTION OF	JP	2017-122352	6486992
ACRYLATES FROM EPOXIDES	***************************************	***************************************	***************************************
PROCESS FOR THE PRODUCTION OF ACID	CN	201380018767.0	104245659
ANHYDRIDES FROM EPOXIDES			
ACRYLIC ACID PRODUCTION METHODS	CN	201380019246.7	201380019
	 		2467
ACRYLIC ACID PRODUCTION METHODS	DE	13752071.4	2817285
ACRYLIC ACID PRODUCTION METHODS	FR	13752071.4	2817285
ACRYLIC ACID PRODUCTION METHODS	GB	13752071.4	2817285
ACRYLIC ACID PRODUCTION METHODS	GC	23635	
ACRYLIC ACID PRODUCTION METHODS	JP	2014-558787	6294240
ACRYLIC ACID PRODUCTION METHODS	JP	2017-214138	6612300
CATALYSTS AND METHODS FOR	MY	PI2014003605	
POLYESTER PRODUCTION PROCESS FOR ACRYLATE PRODUCTION	SG	11201408781Y	
NANOFILTRATION MEMBRANES AND	CN	201910489206.8	
METHODS OF USE	LIN .	201910409200.0	
NANOFILTRATION MEMBRANES AND	EP	148683261	
METHODS OF USE	Li	140003201	
NANOFILTRATION MEMBRANES AND	CN	2014800730708	ZL2014800
METHODS OF USE			73070.8
NANOFILTRATION MEMBRANES AND	JP	2020-117562	
METHODS OF USE			
CATALYST RECYCLE METHODS	DE	15789639.0	3140292
CATALYST RECYCLE METHODS	EP	15789639.0	3140292
CATALYST RECYCLE METHODS	FR	15789639.0	3140292
CATALYST RECYCLE METHODSCATALYST	GB	15789639.0	3140292
RECYCLE METHODS			
CATALYSTS FOR EPOXIDE	JP	2015-556932	
CARBONYLATION			
CATALYSTS FOR EPOXIDE	TH	1601005291	
CARBONYLATION			
INTEGRATED METHODS FOR CHEMICAL	CN	201580037263.2	ZL2015800
SYNTHESIS  INTEGRATED METHODS FOR CHEMICAL	ED	157005465	37263.2
INTEGRATED METHODS FOR CHEMICAL	EP	157995465	
SYNTHESIS	i CA	51622002773	£700
INTEGRATED METHODS FOR CHEMICAL SYNTHESIS	SA	516380372	6799
311N111E313			

Patent	Jurisdiction	Application Number	Registratio
			n Number (if
			(II applicable)
SYNTHESIS OF METAL COMPLEXES AND	CN	201580048681.1	ZL2015800
USES THEREOF			48681.1
SYNTHESIS OF METAL COMPLEXES AND	EP	15745739.1	
USES THEREOF			
SYNTHESIS OF METAL COMPLEXES AND	JP	2017-504029	6670011
USES THEREOF			
SYNTHESIS OF METAL COMPLEXES AND USES THEREOF	SA	517380784	
SYNTHESIS OF METAL COMPLEXES AND	JP	2020-22408	
USES THEREOF			
SYSTEMS AND PROCESSES FOR	CN	201680019327.0	ZL2016800
POLYACRYLIC ACID PRODUCTION			19327.0
SYSTEMS AND PROCESSES FOR	EP	16750004.0	
POLYACRYLIC ACID PRODUCTION			
SYSTEMS AND PROCESSES FOR	MX	2017010404	
POLYACRYLIC ACID PRODUCTION	G A	£1720200£	
SYSTEMS AND PROCESSES FOR POLYACRYLIC ACID PRODUCTION	SA	517382085	
SYSTEMS AND PROCESSES FOR	JР	2021-003963	
POLYACRYLIC ACID PRODUCTION	J1	2021-003303	
SYSTEMS AND PROCESSES FOR	JР		
POLYARCYLIC ACID PRODUCTION			
FLEXIBLE CHEMICAL PRODUCTION	CN	201680019272.3	ZL2016800
PLATFORM			19272.3
FLEXIBLE CHEMICAL PRODUCTION	DE	16750012.3	3256443
PLATFORM			
FLEXIBLE CHEMICAL PRODUCTION	EP	16750012.3	3256443
PLATFORM			
FLEXIBLE CHEMICAL PRODUCTION	FR	16750012.3	3256443
PLATFORM FLEXIBLE CHEMICAL PRODUCTION	CD	16750012.3	2356442
PLATFORM	GB	10730012.3	3256443
FLEXIBLE CHEMICAL PRODUCTION	SA	517382088	
PLATFORM	571	317302000	
FLEXIBLE CHEMICAL PRODUCTION	EP	20191590.7	
PLATFORM			
SYSTEMS AND PROCESSES FOR POLYMER	CN	201680019337.4	
PRODUCTION			
SYSTEMS AND PROCESSES FOR POLYMER PRODUCTION	EP	16749983.9	
SYSTEMS AND PROCESSES FOR POLYMER	JР	2017-542465	
PRODUCTION			
SYSTEMS AND PROCESSES FOR POLYMER	SA	517382086	
PRODUCTION			
SYSTEMS AND PROCESSES FOR POLYMER	SA	521421542	
PRODUCTION	<u> </u>		

Patent	Jurisdiction	Application Number	Registratio
			n Number (if
IMPROVIDATESTS CONTINUOUS	CN	3017000183003	applicable)
IMPROVEMENTS TO CONTINUOUS CARBONYLATION PROCESSES	CN	201680018399.3	
CONTINUOUS CARBONYLATION	DE	167500214	602016033
PROCESSES			607.3
IMPROVEMENTS TO CONTINUOUS	EP	167500214	3256441
CARBONYLATION PROCESSES			
CONTINUOUS CARBONYLATION	FR	167500214	3256441
PROCESSES	***************************************	***************************************	
CONTINUOUS CARBONYLATION PROCESSES	GB	167500214	3256441
IMPROVEMENTS TO CONTINUOUS	JP	2017-542467	
CARBONYLATION PROCESSES			
IMPROVEMENTS TO CONTINUOUS CARBONYLATION PROCESSES	SA	517382089	
CONTINUOUS CARBONYLATION	EP	20168015.4	
PROCESSES			
IMPROVEMENTS TO CONTINUOUS CARBONYLATION PROCESSES	IP	2019-32485	
PROCESS FOR PRODUCTION OF	CN	201680019282.7	ZL2016800
POLYPROPIOLACTONE			19282.7
PROCESS AND SYSTEM FOR PRODUCTION OF POLYPROPIOLACTONE	DE	16750024.8	602016049 433.7
PROCESS FOR PRODUCTION OF	EP	16750024.8	3256510
POLYPROPIOLACTONE		1070002110	0203013
PROCESS AND SYSTEM FOR PRODUCTION OF POLYPROPIOLACTONE	FR	16750024.8	3256510
PROCESS AND SYSTEM FOR PRODUCTION	GB	16750024.8	3256510
OF POLYPROPIOLACTONE			
PROCESS FOR PRODUCTION OF	JP	2017-542461	6847843
POLYPROPIOLACTONE			
PROCESS FOR PRODUCTION OF	SA	517382084	
POLYPROPIOLACTONE			
"PROCESS AND SYSTEM FOR PRODUCTION OF			
POLYPROPIOLACTONE"	CN	202010838259.9	
PROCESS FOR PRODUCTION OF	EP	20206268.3	
POLYPROPIOLACTONE			
PROCESS AND SYSTEM FOR PRODUCTION OF POLYPROPIOLACTONE	JP	2021-033234	
DISTILLATION PROCESS FOR PRODUCTION	CN	201680020428.X	
OF ACRYLIC ACID			
DISTILLATION PROCESS FOR PRODUCTION OF ACRYLIC ACID	EP	167500255	
DISTILLATION PROCESS FOR PRODUCTION	JP	2017-542462	
OF ACRYLIC ACID	σi	EUIT STETUE	

Patent	Jurisdiction	Application Number	Registratio
ratem	Sarisaretron	rippii cation riamoor	n Number
			(if
DIGTH LATION PROGRAM FOR PROPRIOTION	ia	515202001	applicable)
DISTILLATION PROCESS FOR PRODUCTION OF ACRYLIC ACID	SA	517382081	
DISTILLATION PROCESS FOR PRODUCTION	JP	2020-033194	
OF ACRYLIC ACID	J1	2020-033174	
INTEGRATED METHODS FOR CHEMICAL	CN	201680021210.6	
SYNTHESIS			
INTEGRATED METHODS FOR CHEMICAL	EP	16750026.3	
SYNTHESIS		2015 512166	
INTEGRATED METHODS FOR CHEMICAL	JP	2017-542466	
SYNTHESIS ACRYLIC ACID PRODUCTION USING	CN	201780018126.3	
ZEOLITES	CIN	201700010120.3	
ACRYLIC ACID PRODUCTION USING	EP	17770939.1	
ZEOLITES			
ACRYLIC ACID PRODUCTION USING	JP	2018-549537	
ZEOLITES			
ACRYLIC ACID PRODUCTION USING	SA	518400053	
ZEOLITES	WO	DCT##E3010/03000	
ACRYLIC ACID PRODUCTION USING ZEOLITES	WU	PCT/US2019/03900	
SYSTEMS AND PROCESSES FOR	SA		
PRODUCING ORGANIC ACIDS			
DIRECTLYFROM BETA-LACTONES			
ACRYLIC ACID PRODUCTION USING	CN	201780029803.1	
ZEOLITES			
ACRYLIC ACID PRODUCTION USING	EP	17770933.4	
ZEOLITES ACRYLIC ACID PRODUCTION USING	IP	2018-549946	
ZEOLITES	J1	Z010-J43340	
ACRYLIC ACID PRODUCTION USING	SA	518400104	
ZEOLITES			
SYSTEMS AND PROCESSES FOR	CN	201980043535.8	
PRODUCING ORGANIC ACIDS DIRECTLY			
FROM BETA-LACTONES	ED	10025722	
SYSTEMS AND PROCESSES FOR PRODUCING ORGANIC ACIDS DIRECTLY	EP	19825623.2	
FROM BETA-LACTONES			
SYSTEMS AND PROCESSES FOR	JP	2020-573354	
PRODUCING ORGANIC ACIDS DIRECTLY			
FROM BETA-LACTONES			
SYSTEMS AND PROCESSES FOR	SA	520420910	
PRODUCING ORGANIC ACIDS DIRECTLY			
FROM BETA-LACTONES SYSTEMS AND PROCESSES FOR ETHYLENE	CN	201880007787.0	
OXIDE SUPPLY	CIN	ZU100UUU//6/.U	
STREETS STREET			<b>8</b>

Patent	Jurisdiction	Application Number	Registratio n Number (if applicable)
SYSTEMS AND PROCESSES FOR ETHYLENE OXIDE SUPPLY	JP	2019-537341	
ABSORBENT POLYMERS, AND METHODS OF PRODUCING THEREOF AND USES THEREOF	CN	201780065068.X	
POLYAMIDES, AND METHODS OF PRODUCING THEREOF	CN	201880027660.5	
POLYAMIDES, AND METHODS OF PRODUCING THEREOF	EP	18768532.6	
SULFUR- AND PHOSPHORUS-CONTAINING POLYMERS, AND METHODS OF PRODUCING THEREOF	CN	201980021149.9	
SULFUR- AND PHOSPHORUS-CONTAINING POLYMERS, AND METHODS OF PRODUCING THEREOF	EP	19771680.6	
SULFUR- AND PHOSPHORUS-CONTAINING POLYMERS, AND METHODS OF PRODUCING THEREOF	JP	2020-542376	
SULFUR- AND PHOSPHORUS CONTAINING POLYMERS, AND METHODS OF PRODUCING THEREOF	SA	520420180	
AMIDE AND NITRILE COMPOUNDS AND METHODS OF PRODUCING AND USING THEREOF	CN	201880057957.6	
AMIDE AND NITRILE COMPOUNDS AND METHODS OF PRODUCING AND USING THEREOF	EP	18853631.2	
AMIDE AND NITRILE COMPOUNDS AND METHODS OF PRODUCING AND USING THEREOF	JP	2020-513756	
AMIDE AND NITRILE COMPOUNDS AND METHODS OF PRODUCING AND USING THEREOF	KR	10-2020-7009771	
AMIDE AND NITRILE COMPOUNDS AND METHODS OF PRODUCING AND USING THEREOF	SA	520411495	
POLYPROPIOLACTONE FILMS, AND METHODS OF PRODUCING THEREOF	CN	201980019737.9	
POLYPROPIOLACTONE FILMS, AND METHODS OF PRODUCING THEREOF	EP	19782143.2	
POLYPROPIOLACTONE FILMS, AND METHODS OF PRODUCING THEREOF	JP	2020-543848	
POLYPROPIOLACTONE FILMS, AND METHODS OF PRODUCING THEREOF	SA	520420291	
METAL-ORGANIC FRAMEWORK CATALYSTS, AND USES THEREOF	CN	201980053480.9	

Patent	Jurisdiction	Application Number	Registratio n Number
			(if
METAL-ORGANIC FRAMEWORK	EP	19847884.4	applicable)
CATALYSTS, AND USES THEREOF	Li	17047004.4	
METAL-ORGANIC FRAMEWORK	JР	2021-506630	
CATALYSTS, AND USES THEREOF			
METAL-ORGANIC FRAMEWORK	SA	521421202	
CATALYSTS, AND USES THEREOF			
MEMBRANE SEPARATION SYSTEM AND	WO	PCT/US2020/02170	
USES THEREOF		0	
INTEGRATED METHODS AND SYSTEMS	WO	PCT/US2020/02031	
FOR PRODUCING AMIDE AND NITRILE		7	
TUNABLE POLYMER COMPOSITIONS	KR	2011/7017153	101949719
POLYMER BLENDS	DE	11833280.8	2627713
POLYMER BLENDS	EP	11833280.8	2627713
POLYMER BLENDS	FR	11833280.8	2627713
POLYMER BLENDS	GB	11833280.8	2627713
POLYMER BLENDS	JP	2013-533950	6376755
ALIPHATIC POLYCARBONATE	CN	201480034095.7	ZL2014800
COMPOSITIONS AND METHODS			34095.7
ALIPHATIC POLYCARBONATE	EP	14792214	
COMPOSITIONS AND METHODS			
ALIPHATIC POLYCARBONATE	GC	26907	
COMPOSITIONS AND METHODS	_		
ALIPHATIC POLYCARBONATE	WO	PCT/US2014/03234	
COMPOSITIONS AND METHODS		0	
BETA/PROPIOLACTONE BASED	CN	201880004848.8	
COPOLYMERS CONTAINING BIOGENIC			
CARBON, METHODS FOR THEIR			
PRODUCTION AND USES THEREOF	ED	10705(74.0	
BETA/PROPIOLACTONE BASED	EP	18725674.8	
COPOLYMERS CONTAINING BIOGENIC CARBON, METHODS FOR THEIR			
PRODUCTION AND USES THEREOF			
BETA/PROPIOLACTONE BASED	IP	2019-530002	
COPOLYMERS CONTAINING BIOGENIC	Ji	2019-00002	
CARBON, METHODS FOR THEIR			
PRODUCTION AND USES THEREOF			
BETA/PROPIOLACTONE BASED	SA	519401899	
COPOLYMERS CONTAINING BIOGENIC	511	313 (0103)	
CARBON, METHODS FOR THEIR			
PRODUCTION AND USES THEREOF			
BIODEGRADABLE POLYOLS HAVING	WO	NC2019/0005778	
HIGHER BIOBASED CONTENT			
COMPOSITIONS FOR IMPROVED	CN	201880055708.3	
PRODUCTION OF ACRYLIC ACID			
COMPOSITIONS FOR IMPROVED	EP	18743346.1	
PRODUCTION OF ACRYLIC ACID			

Patent	Jurisdiction	Application Number	Registratio n Number (if applicable)
ISOCYANATES, DERIVATIVES, AND	CN	201880064963.4	
PROCESSES FOR PRODUCING THE SAME			
ISOCYANATES, DERIVATIVES, AND	EP	18864727.5	
PROCESSES FOR PRODUCING THE SAME			
ISOCYANATES, DERIVATIVES, AND	JP	2020-513777	
PROCESSES FOR PRODUCING THE SAME			
ISOCYANATES, DERIVATIVES, AND	SA	520411709	
PROCESSES FOR PRODUCING THE SAME			
STABILIZING POLYPROPIOLACTONE BY	CN	201980039581.0	
END-CAPPINGWITH END-CAPPING AGENTS	***************************************		***************************************
STABILIZING POLYPROPIOLACTONE BY	EP	19819545.5	
END-CAPPINGWITH END-CAPPING AGENTS			
STABILIZING POLYPROPIOLACTONE BY	JP	2020-567230	
END-CAPPINGWITH END-CAPPING AGENTS			
STABILIZING POLYPROPIOLACTONE BY	SA	520420796	
END-CAPPINGWITH END-CAPPING AGENTS			
POLYLACTONE FOAMS AND METHODS OF	CN	201980046707.7	
MAKING THE SAME			
POLYLACTONE FOAMS AND METHODS OF	EP	19834185.1	
MAKING THE SAME			
POLYLACTONE FOAMS AND METHODS OF	JP	2021-500911	
MAKING THE SAME			
POLYLACTONE FOAMS AND METHODS OF	SA	521420999	
MAKING THE SAME			
HETEROGENEOUS CATALYSTS, AND USES	WO	PCT/US2020/04401	
THEREOF		3	
RING OPENED BETA-LACTONES FOR USE	WO	PCT/US2021/03658	
IN VACCINATION		1	

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