PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2745991

SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		SECURITY AGREEMENT	SECURITY AGREEMENT		
CONVEYING PART	Y DATA				
		Name	Execution Date		
AMERICAN PACIF	IC CORPORATION	١	02/27/2014		
RECEIVING PARTY	Ź DATA				
Name:	JEFFERIES FI	NANCE LLC, AS ADMINISTRATIVE AGEN	Т		
Street Address:	520 MADISON	AVENUE			
City:	NEW YORK				
State/Country:	NEW YORK				
Postal Code:	10022				
		Number			
Property Type		Number			
Patent Number: 5688		688385			
Patent Number: 8524		524105			
Patent Number:	8	096366			
Patent Number:	6	024860			
Application Numbe	r: 1	3646535			
Application Number: 13509		3509580			
CORRESPONDEN	CE DATA				
Fax Number:		51-4864			
Phone: Email:		06-1200 a.amaru@lw.com			
		_			
Correspondence will be sent via US Mail when the email attempt is unsuccessful.Correspondent Name:LATHAM & WATKINS LLP C/O ANGELA M. AMARU					
Address Line 1:		HRD AVENUE			
Address Line 2:	SUITE				
Address Line 4:	NEW	YORK, NEW YORK 10022			
Audress Line 4.					

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ATTORNEY DOCKET NUMBER:	038507-0356
NAME OF SUBMITTER:	ANGELA M. AMARU
Signature:	/s/ Angela M. Amaru
Date: 02/27/2014	
Total Attachments: 11 source=AmPac-Jefferies Patent Security Ag source=AmPac-Jefferies Patent Security Ag	reement 038507-0356#page2.tif greement 038507-0356#page3.tif greement 038507-0356#page4.tif greement 038507-0356#page5.tif greement 038507-0356#page6.tif greement 038507-0356#page7.tif greement 038507-0356#page8.tif greement 038507-0356#page9.tif greement 038507-0356#page10.tif

<u>GRANT OF SECURITY INTEREST</u> <u>IN PATENTS</u>

This Grant of Security Interest in Patents, dated as of February 27, 2014 (as amended, restated, amended and restated, supplemented and/or otherwise modified from time to time, this "<u>Agreement</u>"), is made by the entities identified as grantors on the signature pages hereto (collectively, the "<u>Grantors</u>") in favor of Jefferies Finance LLC, as administrative agent, (the "<u>Administrative Agent</u>").

THIS GRANT is made to secure the payment or performance, as the case may be, in full of the Secured Obligations, as such term is defined in the Security Agreement among the Grantors, the other assignors from time to time party thereto and the Grantee, dated as of February 27, 2014 (as amended, restated, amended and restated, supplemented and/or otherwise modified from time to time, the "Security Agreement").

NOW THEREFORE, IN CONSIDERATION OF THE FOREGOING AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, receipt and sufficiency of which are hereby acknowledged, the Grantors hereby agree with the Administrative Agent as follows:

SECTION 1. Defined Terms

Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral

SECTION 2.1. Each Grantor hereby assigns and pledges to the Administrative Agent, its successors and assigns, for the benefit of the Secured Parties, and hereby grants to the Administrative Agent, its successors and assigns, for the benefit of the Secured Parties, a security interest (the "<u>Security Interest</u>") in, all right, title or interest in, to or under any and all of the following assets and properties now owned or at any time hereafter acquired by such Grantor or

in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "<u>Patent Collateral</u>"):

(a) all letters patent of the United States or the equivalent thereof in any other country, all registrations and recordings thereof, and all applications for letters patent of the United States or the equivalent thereof in any other country, including registrations, recordings and pending applications in the United States Patent and Trademark Office or any similar offices in any other country, including those listed on Schedule A attached hereto, (b) all rights and privileges arising under applicable Law with respect to such Grantor's use of any patents, (c) all inventions and improvements described and claimed therein, (d) all reissues, divisions, continuations, renewals, extensions and continuations-in-part thereof and amendments thereto, (e) all income, fees, royalties, damages, claims and payments now or hereafter due and/or payable with respect to any of the foregoing including damages and payments for past, present or future infringements thereof.

SECTION 3. Security Agreement.

This Grant has been granted in conjunction with the security interest granted to the Grantee under the Security Agreement. The rights and remedies of the Grantee with respect to the security interest granted herein are as set forth in the Security Agreement, all terms and provisions of which are incorporated herein by reference. In the event that any provisions of this Grant are deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall govern.

SECTION 4. Governing Law

THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK.

SECTION 5. Counterparts

This Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the undersigned have executed this Grant as of the date first set forth above.

AMPAC FINE CHEMICALS, LLC, as a Grantor him By Name: Aslam Malik

Title: President

AMERICAN PACIFIC CORPORATION, a Delaware corporation, as a Grantor

By_

Name: Joseph Carleone Title: President

AMERICAN PACIFIC CORPORATION, a Nevada corporation, as a Grantor

By

Name: Joseph Carleone Title: President

[Signature Page to Grant of Security Interest in Patents]

IN WITNESS WHEREOF, the undersigned have executed this Grant as of the date first set forth above.

AMPAC FINE CHEMICALS, LLC, as a Grantor

By

Name: Aslam Malik Title: President

AMERICAN PACIFIC CORPORATION, a Delaware corporation, as a Grantor

By

Name: Joseph Carleone Title: President

AMERICAN PACIFIC CORPORATION, a Nevada corporation, as a Grantor

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Name: Joseph Carleone Title: President

[Signature Page to Grant of Security Interest in Patents]

JEFFERIES FINANCE LLC, as Administrative Agent

By C May Name: E. Joseph Hess

Title: Managing Director

[Signature Page to Grant of Security Interest in Patents]

Schedule A

PATENTS AND PATENT APPLICATIONS

	Patent Title	Application Number Application Date	Registration Number Grant Date	Status	Owner
1.	METHOD FOR PRODUCING CHLORINE OR HYPOCHLORITE PRODUCT	08551290 10/31/1995	5616234 4/1/1997	ISSUED	American Pacific Corporation
2.	APPARATUS FOR PRODUCING CHLORINE ON-SITE	08621161 3/22/1996	5688385 11/18/1997	ISSUED	American Pacific Corporation
3.	ENVIRONMENTALLY BENEFICIAL AND EFFECTIVE HYDROCHLOROFLUOROCARBON COMPOSITIONS FOR FIRE EXTINGUISHING APPLICATIONS	13350430 1/13/2012	8524105 9/3/2013	ISSUED	American Pacific Corporation
4.	ENVIRONMENTALLY BENEFICIAL AND EFFECTIVE HYDROCHLOROFLUOROCARBON COMPOSITIONS FOR FIRE EXTINGUISHING APPLICATIONS	13026177 2/11/2011	8096366 1/17/2012	ISSUED	American Pacific Corporation
5.	BROMOFLUOROCARBON COMPOSITIONS	13646535 10/5/2012		PENDING	American Pacific Corporation
6.	REDUCTION OF ALDEHYDES AND KETONES TO ALCOHOLS	13509580 11/29/2012		PENDING	American Pacific Corporation Jointly owned by Georgia Tech Research Corporation
7.	SYSTEM FOR ELECTROCHEMICAL DECOMPOSITION OF SODIUM AZIDE	08911982 8/15/1997	6024860 2/15/2000	ISSUED	American Pacific Corporation
8.	BROMOFLUOROCARBON COMPOSITIONS	13269387 10/7/2011		PENDING NOT YET PUBLISHED	American Pacific Corporation
9.	PREPARATION OF MONO- SUBSTITUTED FLUORINATED OXETANE PREPOLYMERS	08539555 10/5/1995	5650483 7/22/1997	ISSUED	AMPAC Fine Chemicals LLC
10	MONO-SUBSTITUTED FLUORINATED OXETANE MONOMERS	08539696 10/5/1995	5654450 8/5/1997	ISSUED	Ampac Fine Chemicals LLC
11	POLYETHER COPREPOLYMERS FORMED FROM MONO- SUBSTITUTED FLUORINATED OXETANE MONOMERS AND TETRAHYDROFURAN	08483219 6/7/1995	5668250 9/16/1997	ISSUED	Ampac Fine Chemicals LLC
12	PREPARATION OF MONO- SUBSTITUTED FLUORINATED MONOMERS AND TETRAHYDRO- FURAN	08539405 10/5/1995	5668251 9/16/1997	ISSUED	Ampac Fine Chemicals LLC
13		08510686 8/3/1995	5674951 10/7/1997	ISSUED	Ampac Fine Chemicals LLC Jointly owned
					with Gencorp

	Patent Title	Application Number Application Date	Registration Number Grant Date	Status	Owner
					Inc.
14	POLYMERS AND PREPOLYMERS FROM MONO-SUBSTITUTED FLUORINATED OXETANE MONOMERS	08371914 1/12/1995	5807977 9/15/1998	ISSUED	Ampac Fine Chemicals LLC
15		08970035 11/13/1997	5817778 10/6/1998	ISSUED	Ampac Fine Chemicals LLC
16	CONTINUOUS PROCESS FOR DIAZOMETHANE ROM AN N- METHYLY-N-NITROSOMAMINE AND FROM METHYLUREA THROUGH N-METHYL-N- NITROSOUREA	08969993 11/13/1997	5854405 12/29/1998	ISSUED	Ampac Fine Chemicals LLC
17	SOLVENT-FREE PROCESS FOR THE PREPARATION OF MONO- SUBSTITUTED FLUORINATED OXETANE MONOMERS	08477168 6/7/1995	6037483 3/14/2000	ISSUED	Ampac Fine Chemicals LLC
18	COPOLYMERS AND COPREPOLYMERS FORMED FROM MONO-SUBSTITUTED FLUORINATED OXETANE MONOMERS AND TETRAHYDROFURAN	09521258 3/8/2000	6380351 4/30/2002	ISSUED	Ampac Fine Chemicals LLC
19	MONOHYDRIC POLYFLUOROOXETANE POLYMER AND RADIATION CURABLE COATINGS CONTAINING A MONOFUNCTIONAL POLYFLUOROOXETANE POLYMER	09473518 12/28/1999	6403760 6/11/2002	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc.
20	FLUORINATED POLYURETHANE ELASTOMERS PREPARED FROM POLYETHER PREPOLYMERS FORMED FROM MONO- SUBSTITUTED FLUORINATED OXETANE MONOMERS	09520815 3/8/2000	6417314 7/9/2002	ISSUED	Ampac Fine Chemicals LLC
21	POLYMERS AND PREPOLYMERS FORMED FROM MONO- SUBSTITUTED FLUORINATED OXETANE MONOMERS	09521263 3/8/2000	6448368 9/10/2002	ISSUED	Ampac Fine Chemicals LLC
22	AMORPHOUS POLYETHER GLYCOLS BASED ON BIS- SUBSTITUTED OXETANE MONOMERS	09615160 7/13/2000	6479623 11/12/2002	ISSUED	Ampac Fine Chemicals LLC
23	PREPARATION OF 2S,3S-N- ISOBUTYL-N-(2-HYDROXY-3- AMINO-4-PHENYLBUTYL) -P- NITROBENZENESULFONYLAMIDE HYDROCHLORIDE AND OTHER DERIVATIVES OF 2-HYDROXY- 1,3-DIAMINES	09747372 12/22/2000	6548706 4/15/2003	ISSUED	Ampac Fine Chemicals LLC
24	CLEAN, HIGH-YIELD PREPARATION OF S,S AND R,S AMINO ACID ISOSTERES	09321645 5/28/1999	6605732 8/12/2003	ISSUED	Ampac Fine Chemicals LLC

	Patent Title	Application Number Application Date	Registration Number Grant Date	Status	Owner
25	RADIATION CURABLE COATING CONTAINING POLYFUOROOXETANE	09397715 9/16/1999	6673889 1/6/2004	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc.
26	MONOHYDRIC POLYFLUOROOXETANE POLYMER AND RADIATION CURABLE COATINGS CONTAINING A MONOFUNCTIONAL POLYFLUOROOXETANE POLYMER	10108318 3/28/2002	6727344 4/27/2004	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc.
27	PREPARATION OF 2S,3S-N- ISOBUTYL-N-(2-HYDROXY-3- AMINO-4-PHENYLBUTYL)-P- NITROBENZENESULFONYLAMIDE HYDROCHLORIDE AND OTHER DERIVATIVES OF 2-HYDROXY- 1,3-DIAMINES	10382185 3/4/2003	6852887 2/8/2005	ISSUED	Ampac Fine Chemicals LLC
28	CLEAN, HIGH-YIELD PREPARATION OF S,S AND R,S AMINO ACID ISOSTERES	10414541 4/14/2003	6867311 3/15/2005	ISSUED	Ampac Fine Chemicals LLC
29	FLUORINATED POLYURETHANE ELASTOMERS PREPARED FROM POLYETHER PREPOLYMERS FORMED FROM MONOSUBSTITUTED FLUORINATED OXETANE MONOMERS AND TETRAHYDROFURAN	09520476 3/8/2000	6891013 5/10/2005	ISSUED	Ampac Fine Chemicals LLC
30	MONOHYDRIC POLYFLUOROOXETANE OLIGOMERS, POLYMERS, AND COPOLYMERS AND COATING CONTAINING THE SAME	10316412 12/11/2002	6927276 8/9/2005	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc.
31	MONOHYDRIC POLYFLUOROOXETANE OLIGOMERS, POLYMERS, AND COPOLYMERS AND COATINGS CONTAINING THE SAME	09727637 12/1/2000	6962966 11/8/2005	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc.
32	MONOHYDRIC POLYFLUOROOXETANE POLYMER AND RADIATION CURABLE COATINGS CONTAINING A MONOFUNCTIONAL POLYFLUOROOXETANE POLYMER	10108916 3/28/2002	6972317 12/6/2005	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc.
33	AMORPHOUS POLYETHER GLYCOLS BASED ON BIS- SUBSTITUTED OXETANE AND TETRAHYDROFURAN MONOMERS	10999362 11/29/2004	6998460 2/14/2006	ISSUED	AMPAC Fine Chemicals LLC Owned jointly With Omnova Solutions Inc. And United States of America, as represented by

		Application	Registration		
	Patent Title	Number Application Date	Number Grant Date	Status	Owner
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34	CLEAN, HIGH-YIELD PREPARATION OF S,S AND R,S AMINO ACID ISOSTERES	11081106 3/14/2005	7309803 12/18/2007	ISSUED	Ampac Fine Chemicals LLC
35	FLUORINATED THERMOSET POLYURETHANE ELASTOMERS PREPARED FROM POLYETHER PREPOLYMERS FORMED FROM MONO-SUBSTITUTED FLUORINATED OXETANE MONOMERS	10678663 10/3/2003	7354985 4/8/2008	ISSUED	Ampac Fine Chemicals LLC
36	PROCESS FOR HALOMETHYL ETHERS OF HYDROXYIMINOMETHYL QUATERNARY PYRIDINIUM SALTS	12274133 11/19/2008	RE41898 10/26/2010	RE-ISSUED Of patent 7414135	Ampac Fine Chemicals LLC
37	PREPARATION OF 2S,3S-N- ISOBUTYL-N-(2-HYDROXY-3- AMINO-4-PHENYLBUTYL)-P- NITROBENZENESULFONYLAMIDE HYDROCHLORIDE AND OTHER DERIVATIVES OF 2-HYDROXY- 1,3-DIAMINES	11052934 2/7/2005	7414144 8/19/2008	ISSUED	Ampac Fine Chemicals LLC
38	SIMULATED MOVING BED CHROMATOGRAPHY FOR STRONGLY RETAINED COMPOUNDS	12059651 3/31/2008	7618539 11/17/2009	ISSUED	Ampac Fine Chemicals LLC
39	PREPARATION OF 2R,3S-N- ISOBUTYL-N-(2-HYDROXY-3- AMINO-4-PHENYLBUTYL)-P- NITROBENZENESULFONYLAMIDE HYDROCHLORIDE AND OTHER DERIVATIVES OF 2-HYDROXY- 1,3-DIAMINES	12190713 8/13/2008	7807850 10/5/2010	ISSUED	Ampac Fine Chemicals LLC
40	PREPARATIVE-SCALE SEPARATION OF ENANTIOMERS OF CHIRAL CARBOXYLIC ACIDS	11750502 5/18/2007	8076511 12/13/2011	ISSUED	Ampac Fine Chemicals LLC
41	PREPARATION OF POLYMER- FREE R-(+)-ALPHA-LIPOIC ACID MAGNESIUM SALT	12483918 6/12/2009	8080674 12/20/2011	ISSUED	Ampac Fine Chemicals LLC
42	CLEAN, HIGH-YIELD PREPARATION OF S,S AND R,S AMINO ACID ISOSTERES	11956515 12/14/2007	8163933 4/24/2012	ISSUED	Ampac Fine Chemicals LLC
43	PROCESS FOR THE PREPARATION OF 3-CYANO-1, 2, 4-TRIAZOLES	12437711 5/8/2009	8198461 6/12/2012	ISSUED	Ampac Fine Chemicals LLC
44	PREPARATION OF 2R,3S-N- ISOBUTYL-N-(2-HYDROXY-3- AMINO-4-PHENYLBUTYL)-P- NITROBENZENESULFONYLAMIDE HYDROCHLORIDE AND OTHER DERIVATIVES OF 2-HYDROXY- 1,3-DIAMINES	12840832 7/21/2010		PENDING PUBLISHED	Ampac Fine Chemicals LLC
45	REACTION SYSTEMS WITH INCORPORATED CHROMATOGRAPHY UNITS FOR	13190781 7/26/2011	8357302 1/22/2013	ISSUED	Ampac Fine Chemicals LLC

Patent Title	Application Number Application Date	Grant Date	Owner
ENHANCED PRODUCT RECOVERY			

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PATENT REEL: 032365 FRAME: 0137

RECORDED: 02/27/2014