PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
AMPAC FINE CHEMICALS LLC	01/31/2011

RECEIVING PARTY DATA

Name:	WELLS FARGO BANK, NATIONAL ASSOCIATION, as Agent
Street Address:	2450 Colorado Avenue, Suite 3000 West
City:	Santa Monica
State/Country:	CALIFORNIA
Postal Code:	90404

PROPERTY NUMBERS Total: 43

Property Type	Number
Patent Number:	5821387
Patent Number:	6011177
Patent Number:	5817778
Patent Number:	5854405
Patent Number:	5807977
Patent Number:	5668251
Patent Number:	5650483
Patent Number:	5703194
Patent Number:	5668250
Patent Number:	5654450
Patent Number:	6037483
Patent Number:	6380351
Patent Number:	6417314
Patent Number:	6448368
Patent Number:	6891013
	PATENT

REEL: 025732 FRAME: 0985

Patent Number:	6852887
Patent Number:	7354985
Patent Number:	6605732
Patent Number:	6867311
Patent Number:	7309803
Patent Number:	6548706
Patent Number:	7414144
Patent Number:	7414135
Application Number:	12483918
Patent Number:	7618539
Patent Number:	7807850
Application Number:	61260747
Application Number:	11956515
Application Number:	12173596
Application Number:	61369966
Application Number:	12840832
Application Number:	12437711
Application Number:	11750502
Patent Number:	5674951
Patent Number:	6972317
Patent Number:	6927276
Patent Number:	6962966
Patent Number:	6673889
Patent Number:	6727344
Patent Number:	6403760
Patent Number:	6479623
Patent Number:	6825316
Patent Number:	6998460

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	1989.260			
NAME OF SUBMITTER:	Nancy Brougher			
Total Attachments: 12 source=Patent Security Agreement AFC#pa	ge2.tif ge3.tif ge4.tif ge5.tif ge6.tif ge6.tif ge7.tif ge9.tif			
source=Patent Security Agreement AFC#page11.tif				

PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT (this "Patent Security Agreement") is made this 31st day of January, 2011, by and among the Grantors listed on the signature pages hereof ("Grantor"), and WELLS FARGO BANK, NATIONAL ASSOCIATION, in its capacity as agent for the Lender Group and the Bank Product Providers (in such capacity, together with its successors and assigns in such capacity, "Agent").

WITNESSETH:

WHEREAS, pursuant to that certain Credit Agreement dated as of January 2, 2011 (as amended, restated, supplemented, or otherwise modified from time to time, the "Credit Agreement") by and among American Pacific Corporation, a Delaware corporation, as borrower ("Borrower"), the domestic subsidiaries of Borrower party thereto as guarantors, the lenders party thereto as "Lenders" (such Lenders, together with their respective successors and assigns in such capacity, each, individually, a "Lender" and, collectively, the "Lenders"), and Agent, the Lender Group has agreed to make certain financial accommodations available to Borrower from time to time pursuant to the terms and conditions thereof; and

WHEREAS, the members of Lender Group are willing to make the financial accommodations to Borrower as provided for in the Credit Agreement, but only upon the condition, among others, that the Grantor shall have executed and delivered to Agent, for the benefit of the Lender Group and the Bank Product Providers, that certain Security Agreement, dated as of January 31, 2011 (including all annexes, exhibits or schedules thereto, as from time to time amended, restated, supplemented or otherwise modified, the "Security Agreement"); and

WHEREAS, pursuant to the Security Agreement, Grantor is required to execute and deliver to Agent, for the benefit of the Lender Group and the Bank Product Providers, this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby agrees as follows:

- 1. <u>DEFINED TERMS</u>. All initially capitalized terms used but not otherwise defined herein have the meanings given to them in the Security Agreement or, if not defined therein, in the Credit Agreement.
- 2. <u>GRANT OF SECURITY INTEREST IN PATENT COLLATERAL</u>. Grantor hereby unconditionally grants, assigns, and pledges to Agent, for the benefit each member of the Lender Group and each of the Bank Product Providers, to secure the Secured Obligations, a continuing security interest (referred to in this Patent Security Agreement as the "<u>Security Interest</u>") in all of Grantor's right, title and interest in and to the following, whether now owned or hereafter acquired or arising (collectively, the "<u>Patent Collateral</u>"):

- (a) all of its Patents and Patent Intellectual Property Licenses to which it is a party including those referred to on <u>Schedule I</u>;
- (b) all divisionals, continuations, continuations-in-part, reissues, reexaminations, or extensions of the foregoing; and
- (c) all products and proceeds of the foregoing, including any claim by Grantor against third parties for past, present or future infringement of any Patent or any Patent exclusively licensed under any Intellectual Property License, including the right to receive damages, or right to receive license fees, royalties, and other compensation under any Patent Intellectual Property License.
- 3. <u>SECURITY FOR SECURED OBLIGATIONS</u>. This Patent Security Agreement and the Security Interest created hereby secures the payment and performance of the Secured Obligations, whether now existing or arising hereafter. Without limiting the generality of the foregoing, this Patent Security Agreement secures the payment of all amounts which constitute part of the Secured Obligations and would be owed by Grantor to Agent, the Lender Group, the Bank Product Providers or any of them, whether or not they are unenforceable or not allowable due to the existence of an Insolvency Proceeding involving any Grantor.
- 4. <u>SECURITY AGREEMENT</u>. The Security Interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interests granted to Agent, for the benefit of the Lender Group and the Bank Product Providers, pursuant to the Security Agreement. Grantor hereby acknowledges and affirms that the rights and remedies of Agent with respect to the Security Interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. To the extent there is any inconsistency between this Patent Security Agreement and the Security Agreement, the Security Agreement shall control.
- 5. <u>AUTHORIZATION TO SUPPLEMENT</u>. If Grantor shall obtain rights to any new patent application or issued patent or become entitled to the benefit of any patent application or patent for any divisional, continuation, continuation-in-part, reissue, or reexamination of any existing patent or patent application, the provisions of this Patent Security Agreement shall automatically apply thereto. Grantor shall give prompt notice in writing to Agent with respect to any such new patent rights. Without limiting Grantor's obligations under this Section, Grantor hereby authorizes Agent unilaterally to modify this Patent Security Agreement by amending <u>Schedule I</u> to include any such new patent rights of Grantor. Notwithstanding the foregoing, no failure to so modify this Patent Security Agreement or amend <u>Schedule I</u> shall in any way affect, invalidate or detract from Agent's continuing security interest in all Collateral, whether or not listed on <u>Schedule I</u>.
- 6. <u>COUNTERPARTS</u>. This Patent Security Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken

together, shall constitute but one and the same Patent Security Agreement. Delivery of an executed counterpart of this Patent Security Agreement by telefacsimile or other electronic method of transmission shall be equally as effective as delivery of an original executed counterpart of this Patent Security Agreement. Any party delivering an executed counterpart of this Patent Security Agreement by telefacsimile or other electronic method of transmission also shall deliver an original executed counterpart of this Patent Security Agreement but the failure to deliver an original executed counterpart shall not affect the validity, enforceability, and binding effect of this Patent Security Agreement.

- CONSTRUCTION. This Patent Security Agreement is a Loan Document. Unless the context of this Patent Security Agreement clearly requires otherwise, references to the plural include the singular, references to the singular include the plural, the terms "includes" and "including" are not limiting, and the term "or" has, except where otherwise indicated, the inclusive meaning represented by the phrase "and/or". The words "hereof", "herein", "hereby", "hereunder", and similar terms in this Patent Security Agreement refer to this Patent Security Agreement as a whole and not to any particular provision of this Patent Security Agreement. Section, subsection, clause, schedule, and exhibit references herein are to this Patent Security Agreement unless otherwise specified. Any reference in this Patent Security Agreement to any agreement, instrument, or document shall include all alterations, amendments, changes, extensions, modifications, renewals, replacements, substitutions, joinders, and supplements, thereto and thereof, as applicable (subject to any restrictions on such alterations, amendments, changes, extensions, modifications, renewals, replacements, substitutions, joinders, and supplements set forth herein). The words "asset" and "property" shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts, and contract rights. Any reference herein to the satisfaction, repayment, or payment in full of the Secured Obligations shall mean the repayment in full in cash or immediately available funds (or, (a) in the case of contingent reimbursement obligations with respect to Letters of Credit, providing Letter of Credit Collateralization, and (b) in the case of obligations with respect to Bank Products (other than Hedge Obligations), providing Bank Product Collateralization) of all of the Secured Obligations (including the payment of any termination amount then applicable (or which would or could become applicable as a result of the repayment of the other Secured Obligations) under Hedge Agreements provided by Hedge Providers) other than (i) unasserted contingent indemnification Secured Obligations, (ii) any Bank Product Obligations (other than Hedge Obligations) that, at such time, are allowed by the applicable Bank Product Provider to remain outstanding without being required to be repaid or cash collateralized, and (iii) any Hedge Obligations that, at such time, are allowed by the applicable Hedge Provider to remain outstanding without being required to be repaid. Any reference herein to any Person shall be construed to include such Person's successors and permitted assigns. Any requirement of a writing contained herein shall be satisfied by the transmission of a Record.
- 8. THE VALIDITY OF THIS PATENT SECURITY AGREEMENT, THE CONSTRUCTION, INTERPRETATION, AND ENFORCEMENT HEREOF, AND THE RIGHTS OF THE PARTIES HERETO WITH RESPECT TO ALL MATTERS

ARISING HEREUNDER OR RELATED HERETO SHALL BE DETERMINED UNDER, GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

- 9. THE PARTIES AGREE THAT ALL ACTIONS OR PROCEEDINGS ARISING IN CONNECTION WITH THIS PATENT SECURITY AGREEMENT SHALL BE TRIED AND LITIGATED ONLY IN THE STATE AND, TO THE EXTENT PERMITTED BY APPLICABLE LAW, FEDERAL COURTS LOCATED IN THE COUNTY OF NEW YORK, STATE OF NEW YORK; PROVIDED, HOWEVER, THAT ANY SUIT SEEKING ENFORCEMENT AGAINST ANY COLLATERAL OR OTHER PROPERTY MAY BE BROUGHT, AT AGENT'S OPTION, IN THE COURTS OF ANY JURISDICTION WHERE AGENT ELECTS TO BRING SUCH ACTION OR WHERE SUCH COLLATERAL OR OTHER PROPERTY MAY BE FOUND. AGENT AND EACH GRANTOR WAIVE, TO THE EXTENT PERMITTED UNDER APPLICABLE LAW, ANY RIGHT EACH MAY HAVE TO ASSERT THE DOCTRINE OF FORUM NON CONVENIENS OR TO OBJECT TO VENUE TO THE EXTENT ANY PROCEEDING IS BROUGHT IN ACCORDANCE WITH THIS SECTION 9.
- 10. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, AGENT AND GRANTOR HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS PATENT SECURITY AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS. AGENT AND GRANTOR REPRESENT THAT EACH HAS REVIEWED THIS WAIVER AND EACH KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL. IN THE EVENT OF LITIGATION, A COPY OF THIS PATENT SECURITY AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have caused this Patent Security Agreement to be executed and delivered as of the day and year first above written.

GRANTOR:

AMPAC FINE CHEMICALS LLC,

a Culifornia limited liability company

Name: Dr. Aslam Malik

Title: President

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

ACCEPTED AND ACKNOWLEDGED BY:

AGENT:

WELLS FARGO BANK, NATIONAL ASSOCIATION

By: Justin Button

Name: Justin Button
Title: Vice President

REEL: 025732 FRAME: 0993

SCHEDULE I to PATENT SECURITY AGREEMENT

Patents and Patent Applications

Grantor	Country	Patent	Application/	Issue/Filing
. 5:			Patent No.	Date
Ampac Fine Chemicals LLC	U.S.	Polyarenes from aryl ketones for synthesis of crisnatol mesylate	5,821,387	10/13/1998
	U.S.	Process for 4-sulfonamidolphenyl hydrazines	6,011,177	1/4/2000
	U.S.	Large scale batch process for diazomethane	5,817,778	10/6/1998
Ī	U.S.	Continuous process for diazomethane From	5,854,405	12/29/1998
	0.0.	an N-Methyl-N-Nitrosoamine and From Methylurea Through N-Methyl-N- Nitrosourea	2,02 1,102	12/23/13/0
-	U.S.	Polymers and prepolymers from mono- substituted fluorinated oxetane monomers	5,807,977	9/15/1998
-	U.S.	Preparation of mono-substituted fluorinated monomers and tetrahydro- furan	5,668,251	9/16/1997
-	U.S.	Preparation of mono-substituted fluorinated oxetane prepolymers	5,650,483	7/22/1997
	U.S.	Fluorinated thermoset polyurethane	5,703,194	12/30/1997
		elastomers prepared from polyether		
		coprepolymers formed from mono-		
		substituted fluorinated oxetane monomers		
-	U.S.	and tetrahydrofuran	5,668,250	9/16/1997
	U.S.	Polyether coprepolymers formed from mono-substituted fluorinated oxetane	3,008,230	9/10/1997
		monomers and tetrahydrofuran		
-	U.S.	Mono-substituted fluorinated oxetane	5,654,450	8/5/1997
	0.5.	monomers	3,034,430	6/3/1997
-	U.S.	Solvent-free process for the preparation of	6,037,483	3/14/2000
	0.5.	mono-substituted fluorinated oxetane	0,057,105	3/11/2000
-	U.S.	monomers Consideration And Convenience Formers	6,380,351	4/30/2002
	U.S.	Copolymers And Coprepolymers Formed From Mono-Substituted Fluorinated	0,380,331	4/30/2002
		Oxetane Monomers And Tetrahydrofuran		
	U.S.	Fluorinated polyurethane elastomers	6,417,314	7/9/2002
		prepared from polyether prepolymers		
		formed from mono-substituted fluorinated		
		oxetane monomers		
	U.S.	Polymers and prepolymers formed from mono-substituted fluorinated oxetane monomers	6,448,368	9/10/2002
	U.S.	Fluorinated polyurethane elastomers	6,891,013	5/10/2005
	0.5.	prepared from polyether prepolymers	0,091,015	3/10/2003
		formed from mono-substituted fluorinated		
		oxetane monomers and tetrahydrofuran		
<u> </u>	U.S.	Preparation of 2S, 3S-N-usibytyl-N-(2-	6,852,887	2/8/05
	0.6.	hydroxy-3-amino-4-phenylbutyl)-P-	0,032,007	2/0/03
		notrobenezenesulfonylamide hydrochloride		
		and other derivatices of 2-hydrocy-1, 3-		
		diamines		

Grantor	Country	Patent	Application/ Patent No.	Issue/Filing Date
	U.S.	Fluorinated thermoset polyurethane elastomers prepared from polyether prepolymers formed mono-substituted fluorinated oxetane monomers	7,354,985	4/8/2008
	U.S.	Clean High-Yield Preparation of S,S and R,S Amino Acid Isosteres	6,605,732	8/12/2003
	U.S.	Clean High-Yield Preparation of S,S and R,S Amino Acid Isosteres	6,867,311	3/15/2005
	U.S.	Clean, high yield preparation of S, S and R,S amino acid isosteres	7,309,803	12/18/2007
	U.S.	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	6,548,706	4/15/2003
	U.S.	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	7,414,144	8/19/2008
	U.S.	Process for halomethyl ethers of hydroxyiminomethyl quaternary pyridinium salts	7,414,135	8/19/2008
	U.S.	Preparation of Polymer-Free R-(+)-Alpha- Lipoic Acid	(12/483,918)	(6/12/2009)
	U.S.	Simulated Moving Bed Chromotography for Strongly Retained Compounds	7,618,539 (12/059,651)	11/17/2009 (3/31/2008)
	U.S.	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	7,807,850 (12/190,713)	(08/13/2008)
	U.S.	Aldehyde and Keytone Reduction	(provisional, 61/260747)	(11/12/2009)
	U.S.	Clean, high yield preparation of S, S and R,S amino acid isosteres	(11/956,515)	(12/14/2007)
	U.S.	Process for Halomethyl Ethers of Hydroxyiminomethyl Quaternary Pyridinium Salts	(12/173,596)	(7/15/2008)
	U.S.	Reaction Systems With Incorporated Chromotography units for Enhanced Product Recovery	(61/369,966)	(8/2/2010)
	U.S.	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	(12/840,832)	(7/21/2010)
	U.S.	PROCESS FOR THE PREPARATION OF CYANO-SUBSTITUTED-NITROGEN- CONTAINING HETEROARYL COMPOUNDS	(12/437,711)	05/08/09
	U.S.	Preparative-Scale Separation of	(11/750,502)	05/18/07

Grantor	Country	Patent	Application/ Patent No.	Issue/Filing Date
		Enantionmers of Chiral Carboxylic Acids	Tatcht ivo.	Date
Ampac Fine	U.S.	Abrasion-resistant and low friction coating	5,674,951	10/7/1997
Chemicals LLC	0.5.	compositions	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20,,,,
and Omnova Solutions Inc.	U.S.	Monohydric Polyfluorooxetane Polymer and Radiation Curable Coatings Containing	6,972,317	12/06/2005
		a Monofunctional Polyfluorooxetane Polymer		
	U.S.	Monohydric polyfluorooxetane oligomers, polymers, and copolymers, and coating	6,927,276	8/9/2005
		containing the same		
	U.S.	Monohydric polyfluorooxetane oligomers, polymers, and copolymers, and coating containing the same	6,962,966	11/8/2005
	U.S.	Radiation curable coating containing polyfluorooxetane	6,673,889	1/6/2004
	U.S.	Monohydric polyfluorooxetane polymer and radiation curable coatings containing a monofunctional polyfluorooxetane polymer	6,727,344	8/27/2004
	U.S.	Monohydric polyfluorooxetane polymer and radiation curable coatings containing a monofunctional polyfluorooxetane polymer	6,403,760	6/11/2002
Ampac Fine Chemicals LLC,	U.S.	Amorphous polyether glycols based on bissubstituted oxetane monomers	6,479,623	11/12/2002
Omnova Solutions Inc. and United	U.S.	Amorphous polyether glycols based on bis- substituted oxetane and tetrahydrofuran monomers	6,825,316	11/30/2004
States of America (as represented by Secretary of the	U.S.	Amorphous Polyether Glycols based on Bis-Substituted Oxetane and Tetrahydrofuran Monomers	6,998,460	02/14/2006
Navy)				
FOREIGN				
Ampac Fine Chemicals LLC	Japan	Mono-substituted fluorinated oxetane monomer	JP3335427	10/15/2002
	Japan	Large scale batch process for diazomethane	JP3017982	3/13/2000
	Japan	Continuous process for diazomethane	JP3294560	6/24/2002
	EU	Improved synthesis of 2S,3S-etc nitrobenzenesulfonamide hydrochloride	EP1244610	7/16/08
	EU	Preparation of S.S. & R.S Amino Acid Isosteres	EU EP1050532	08/18/2004
	EU	Continuous Process for Diazomethance From an N-Methyl-N-Nirtrosoamine and From Methylurea Through N-Methyl-N- Nitrosourea Published as: Continuous process for diazomethane	EU EP916648	01/23/2002
	EU	Large scale Batch Process For Diazomethane	EU EP916649	05/19/1990
	EU	Process for Halomethy Ethers of Hydroxyiminomethyl Quarternary Pyridinium Salts	EU (06253966.3)	(7/28/2006)

Grantor	Country	Patent	Application/ Patent No.	Issue/Filing Date
	EU	Improved Preparation of 2S, 3S-N-Isobutyl-N-(2-Hydroxy-3-Amino-4-Phenylbutyl)-P-NI-Trobenzenesulfonylamide Hydrochloride and Other Derivatives of 2-Hydroxy-1,3-Diamines	EU (EP08160457.1)	(7/15/2008)
	France	Preparation and Polymerization of Perfluoroalkoxy Alkylene Oxides to Prepare Hydrophobic Polyethers	France 2694297	07/07/1995
	France	Clean High-Yield Preparation of S,S and R,S Amino Acid Isosteres	France FR1050532	08/18/2004
	France	Continuous Process for Diazomethane From an N-Methyl-N-Nitrosoamine and From Methylurea Through N-Methyl-N- Nitrosourea	France FR916648	01/23/2002
	France	Large Scale Batrch Process for Diazomethane	France FR916649	01/23/2002
	Germany	Clean High-Yield Preparation of S,S and R,S Amino Acids	Germany DE1050532	09/01/2005
	Germany	Continuous Process for Diazomethane From an N-Methyl-N-Nitrosoamine and From Methylurea Through N-Methyl-N- Nitrosourea	Germany DE916648	01/23/2002
	Germany	Large Scale Batch Process for Diazomethane	Germany DE916649	01/23/2002
	Great Britain	Preparation and Polymerization of Perflouroalkoxy Alkylene Oxides to Prepare Hydrophobic Polyethers	Great Britain 2269816	02/23/1994
	Great Britain	Clean High-Yield Preparation of S,S and R,S Amino Acids	Great Britain GB1050532	08/18/2004
	Great Britain	Continous Process for Diazomethane From an N-Methyl-N-Nitrosoamine and From Methylurea Through N-Methyl-N- Nitrosourea	Great Britain GB916648	01/23/2002
	Great Britain	Large Scale Batch Process for Diazomethane	Great Britain 916649	01/23/2002
	Switzerland	Clean High-Yield Preparation of S,S and R,S Amino Acids Isoteres	Switzerland CH1050532	08/18/2004
	Switzerland	Continous Process for Diazomethane From an N-Methyl-N-Nitrosoamine and From Methylurea Through N-Methyl-N- Nitrosourea	Switzerland CH916648	01/23/2002
	Switzerland	Large Scale Batch Process For Diazomethane	Switzerland CH916649	01/23/2002
	Canada	Process for Halomethy Ethers of Hydroxyiminomethyl Quarternary Pyridinium Salts	2,553,578 (2553578)	9/28/2010 (07/26/2006)
	Canada	Preparation and Polymerization of Perfluoroalkoxy Alkylene Oxides to Prepare Hydrophobic Polyethers	CA2100218	11/27/2007

Grantor	Country	Patent	Application/ Patent No.	Issue/Filing Date
	Canada	Polymers and Prepolymers from Mono- Substituted Fluorinated Oxetane Monomers	CA2,210,204	11/7/2006
	EU	Polymers and Prepolymers From Mono- Substituted Fluorinated Oxetane Monomers	EP0811004	12/6/2006
	Germany	Preparation and Polymerization of Perfluoroalkoxy Alkylene Oxides to Prepare Hydrophobic Polyethers	DE4323307	6/24/1999
	Japan	Polymers and Prepolymers From Mono- Substituted Fluorinated Oxetane Monomers	JP4112611	4/18/2008
	Belgium	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	BE1244610	7/16/2008
	France	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	FR1244610	7/16/2008
	Germany	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	DE1244610	7/16/2008
	Great Britain	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	GB1244610	7/16/2008
	Ireland	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	IE1244610	7/16/2008
	Switzerland	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	CH1244610	7/16/2008
	EU	Simulated Moving Bed Chromotography for Strongly Retained Compounds	(09156363.6)	(7/13/2009)
Co-owned by Omnova and Ampac Fine Chemicals LLC	EU	Monohydric Polyflourooxetane Oligomers, Polymers, ad Copolymers and Coatings Containing the Same	EP1244727	10/02/2002
	EU	Radiation Curable Coating Containing Polyfluorooxetane	EP1189964	10/17/2007
	Canada	Amorphous Polyether Glycols Based on Bis-Substituted Oxetane Monomers	CA2379371	1/15/2002

Patent Licenses

1. License Agreement by and among Aerojet-General Corp., Aerojet Fine Chemicals LLC, and Omnova Solutions Inc., dated September 20, 1999 and subsequently assigned to Ampac Fine Chemicals LLC by Aerojet-General Corp. and Aerojet Fine Chemicals LLC pursuant to the Bill of Sale and Assignment and Assumption Agreement dated November 30, 2005, relating to patent numbers: 7,022,801, 7,087,710, ((60/779,914), (11/051,416), (10/142,229), (10/492,572), (10/719,665), 6,660,828, 6,855,775, Taiwan (91136170), Thailand (095371), Korea (2003-7000590), EU(02769705.1), EU (02792329.1), EP1481021, China 02801483.9, Canada (CA2477451), China (03805299.7), Japan JP4017988.

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