506707774 06/10/2021

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	TERM LOAN PATENT SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
ECO SERVICES OPERATIONS CORP.	06/09/2021

RECEIVING PARTY DATA

Name:	CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, AS AGENT
Street Address:	ELEVEN MADISON AVENUE
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10010

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	6818799

CORRESPONDENCE DATA

Fax Number: (212)751-4864

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name: LATHAM & WATKINS LLP, C/O JESSICA BAJADA

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ATTORNEY DOCKET NUMBER:	049133-0423
NAME OF SUBMITTER:	JESSICA BAJADA-SILVA
SIGNATURE:	/s/ Jessica Bajada-Silva
DATE SIGNED:	06/10/2021

Total Attachments: 10

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TERM LOAN PATENT SECURITY AGREEMENT

TERM LOAN PATENT SECURITY AGREEMENT dated as of June 9, 2021 (this "Patent Security Agreement"), by and among PQ Corporation, a Pennsylvania corporation ("PQ"), Eco Services Operations Corp., a Delaware corporation ("Eco Services"), Chem32 LLC, a Texas limited liability company (each, a "Grantor") and Credit Suisse AG, Cayman Islands Branch, as administrative agent and collateral agent (together with its successors and permitted assigns in such capacities, the "Administrative Agent") for the Secured Parties (as defined in the Term Loan Credit Agreement).

Reference is made to that certain Term Loan Credit Agreement, dated as of June 9, 2021 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Term Loan Credit Agreement"), by and among CPQ Midco I Corporation, a Delaware corporation ("CPQ"), as Holdings prior to the consummation of the Holdings Assignment, PQ, as the Parent Borrower prior to the consummation of the Performance Chemicals Sale, Ecovyst Catalyst Technologies LLC, a Delaware limited liability company ("Ecovyst"), as a Borrower and, on and after the Performance Chemicals Closing Date, the Parent Borrower, Eco Services, as a Borrower, the Lenders from time to time party thereto and the Administrative Agent.

Reference is also made to that certain Term Loan Pledge and Security Agreement dated as of June 9, 2021 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), by and among CPQ, as Holdings prior to the consummation of the Holdings Assignment, PQ, as the Parent Borrower prior to the consummation of the Performance Chemicals Sale, Ecovyst, as a Borrower and, on and after the Performance Chemicals Closing Date, the Parent Borrower, Eco Services, as a Borrower, the other Grantors (as defined therein) from time to time party thereto and the Administrative Agent for the Secured Parties under and as defined in the Term Loan Credit Agreement.

The Lenders (as defined in the Term Loan Credit Agreement) have extended credit to the Borrowers subject to the terms and conditions set forth in the Term Loan Credit Agreement. Consistent with the requirements set forth in Sections 4.01 and 5.12 of the Term Loan Credit Agreement and Section 4.03(c) of the Security Agreement, the parties hereto agree as follows:

SECTION 1. Terms. Capitalized terms used herein and not otherwise defined herein have the meanings specified in the Security Agreement.

SECTION 2. Grant of Security Interest. As security for the prompt and complete payment or performance, as the case may be, in full of the Secured Obligations, each Grantor, pursuant to the Security Agreement, did and hereby does pledge, collaterally assign, mortgage, transfer and grant to the Administrative Agent, its successors and permitted assigns, on behalf of and for the benefit of the Secured Parties, a continuing security interest in all of its right, title and interest in, to and under all of the following assets, whether now owned by or owing to, or hereafter acquired by or arising in favor of such Grantor, and regardless of where located (collectively, the "Patent Collateral"):

(a) any and all patents and patent applications (including but not limited to the patents and patent applications listed on <u>Schedule I</u> hereto); (b) all inventions described and claimed therein; (c) all reissues, divisions, continuations, renewals, extensions and continuations in part thereof; (d) all income, royalties, damages, claims, and payments now or hereafter due or payable under and with respect thereto, including, without limitation, damages and payments for past, present and future infringements thereof; (e) all rights to sue for past, present, and future infringements thereof; and (f) all rights corresponding to any of the foregoing, in each case, excluding any Excluded Assets.

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SECTION 3. Security Agreement. The security interests granted to the Administrative Agent herein are granted in furtherance, and not in limitation of, the security interests granted to the Administrative Agent pursuant to the Security Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Administrative Agent with respect to the Patent Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Patent Security Agreement and the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 4. Governing Law. This Patent Security Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

SECTION 5. Counterparts. This Patent Security 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.

[Signature Pages Follow]

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

PQ CORPORATION ECO SERVICES OPERATIONS CORP. CHEM32 LLC

By:

Name: Joseph S. Koscinski

Title: Secretary

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, as Administrative Agent

By: Name: William O'Daly
Title: Authorized Signatory

Title: Authorized Signatory

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SCHEDULE I

PATENTS

REGISTERED OWNER	PATENT NO.	ISSUE DATE	TITLE
Eco Services Operations Corp.	6,818,799	11/16/2004	PROCESS FOR REMOVING TAR FROM SPENT ACID
PQ Corporation	9,228,029	1/5/2016	CATALYST SUPPORTS, CATALYSTS AND THEIR MANUFACTURE AND USE
PQ Corporation	7,229,655	6/12/2007	COMPOSITION OF AND PROCESS FOR USING SILICA XEROGEL FOR BEER STABILIZATION
PQ Corporation	7,538,067	5/26/2009	COMPOSITION OF AND PROCESS FOR USING SILICA XEROGEL FOR BEER STABILIZATION
PQ Corporation	10,384,162	8/20/2019	HIGH SILICA CHABAZITE FOR SELECTIVE CATALYTIC REDUCTION, METHODS OF MAKING AND USING SAME
PQ Corporation	6,887,822	5/3/2005	METHOD FOR MAKING SILICA SUPPORTED, CRUSH- RESISTANT CATALYSTS
PQ Corporation	6,641,796	11/4/2003	METHOD FOR MAKING ZEOLITES AND ZEOLITE MIXTURES HAVING ENHANCED CATION EXCHANGE PROPERTIES
PQ Corporation	8,192,539	6/05/2012	MIXTURES OF ZEOLITE AND RAP/RAS

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PQ Corporation	8,512,659	8/20/2013	NOVEL IRON- CONTAINING ALUMINOSILICATE ZEOLITES AND METHODS OF MAKING AND USING SAME
PQ Corporation	8,541,331	9/14/2013	NOVEL IRON- CONTAINING ALUMINOSILICATE ZEOLITES AND METHODS OF MAKING AND USING THE SAME
PQ Corporation	7,645,718	01/12/2010	NOVEL MICROPOROUS CRYSTALLINE MATERIAL COMPRISING A MOLECULAR SIEVE OR ZEOLITE HAVING AN 8-RING PORE OPENING STRUCTURE AND METHODS OF MAKING AND USING SAME
PQ Corporation	7,883,678	02/08/2011	NOVEL MICROPOROUS CRYSTALLINE MATERIAL COMPRISING A MOLECULAR SIEVE OR ZEOLITE HAVING AN 8-RING PORE OPENING STRUCTURE AND METHODS OF MAKING AND USING SAME
PQ Corporation	7,141,232	11/28/2006	PREPARATION OF MOLECULAR SIEVES INVOLVING SPRAY DRYING*
PQ Corporation	10,100,602	10/16/2018	SELF-PRESSURIZING SOLUBLE ALKALI SILICATE FOR USE IN SEALING SUBTERRANEAN SPACES**

PQ Corporation	9,827,560	11/28/2017	SMALL CRYSTAL FERRIERITE AND METHOD OF MAKING THE SAME
PQ Corporation	9,981,256	5/29/2018	STABILIZED MICROPOROUS CRYSTALLINE MATERIAL, THE METHOD OF MAKING THE SAME, AND THE USE FOR SELECTIVE CATALYTIC REDUCTION OF NOX
PQ Corporation	9,517,458	12/13/2016	STABILIZED MICROPOROUS CRYSTALLINE MATERIAL, THE METHOD OF MAKING THE SAME, AND THE USE FOR SELECTIVE CATALYTIC REDUCTION OF NOX
PQ Corporation	10,377,638	8/13/2019	STABILIZED MICROPOROUS CRYSTALLINE MATERIAL, THE METHOD OF MAKING THE SAME, AND THE USE FOR SELECTIVE CATALYTIC REDUCTION OF NOX
PQ Corporation	9,458,023	10/04/2016	USE OF AQUEOUS ALKALI ALUMINOSILICATE FOR PROFILE MODIFICATION, WATER CONTROL, AND STABILIZATION
PQ Corporation	9,212,304	12/15/2015	USE OF HIGH RATIO AQUEOUS ALKALI SILICATES IN DRILLING FLUIDS
PQ Corporation	7,550,404	6/23/2009	WOOD POLYMER- ZEOLITE COMPOSITES
PQ Corporation	8,298,331	10/30/2012	ZEOLITE AND WATER SLURRIES FOR ASPHALT CONCRETE PAVEMENT

PQ Corporation	8,518,369	08/27/2013	ZEOLITE IMPREGNATED WITH TITANIUM DIOXIDE
PQ Corporation	9,308,521	4/12/2016	ZEOLITE Y
Chem32 LLC	10,286,373	5/14/2019	METHOD OF SULFURIZING A BED OF METAL CONTAINTAING PARTICLES IN THE ABSENCE OF HYDROGEN GAS

PATENT APPLICATIONS

APPLICANT	APPLICATION NO.	FILING DATE	TITLE
PQ Corporation	16/488,981	2/8/2018	ARCHITECTURAL COATING COMPOSITION CONTAINING HIGH RATIO SOLUBLE SILICATES
PQ Corporation	16/901,395	6/15/2020	CHABAZITE ZEOLITE SYNTHESIS WITH ORGANIC TEMPLATES
PQ Corporation	16/723,145	12/20/2019	DIRECT SYNTHESIS OF METAL- CONTAINING CHA ZEOLITES
PQ Corporation	16/168,356	10/23/2018	NOVEL METAL- CONTAINING ZEOLITE BETA FOR NOX REDUCTION AND METHODS OF MAKING THE SAME
PQ Corporation	16/296,907	3/8/2019	PRODUCTION OF HYDROTHERMALLY STABLE CHA ZEOLITES
PQ Corporation	16/398,465	4/30/2019	LOW-SILICA CHABAZITE ZEOLITES WITH HIGH ACIDITY

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PQ Corporation	16/804,610	2/28/2020	CHROMIUM-
			ON-SILICA
			CATALYSTS AND
			METHODS OF
			MAKING THE SAME
PQ Corporation	16/949,283	10/23/2020	METHOD FOR
			PLUGGING AND
			ABANDONING OIL
			AND GAS WELLS*
PQ Corporation	63/154,134	2/26/2021	A
			SUSTAINABLE TWO-
			COMPONENT
			ANNULAR GROUT
			COMPOSITION AND
			METHOD FOR USE
			WITH A TUNNEL-
			BORING MACHINE
PQ Corporation	63/147,306	2/09/2021	SILICA GEL AS REINFORCEMENT AGENT FOR RUBBER COMPOUNDS
PQ Corporation	16/993,661	8/14/2020	STABLE SOLUTION OF SODIUM AND IRON SILICATE, PROCESS FOR PREPARING SAID SOLUTION AND USES THEREOF
Chem32 LLC	16/364,460	3/26/19	METHOD OF SULFURIZING METAL CONTAINING PARTICLES

Chem32 LLC	16/633,990	7/25/2018	METHOD OF
			TREATING A
			HYDROCONVERSION
			CATALYST

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RECORDED: 06/10/2021