502634629 01/14/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2681237

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
GSE ENVIRONMENTAL, LLC (FKA GSE LINING TECHNOLOGY, INC.)	01/10/2014
GSE ENVIRONMENTAL, INC.	01/10/2014
SYNTEC LLC	01/10/2014

RECEIVING PARTY DATA

Name:	GENERAL ELECTRIC CAPITAL CORPORATION, AS ADMINISTRATIVE AGENT
Street Address:	500 W MONROE STREET
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60661

PROPERTY NUMBERS Total: 22

502634629

Property Type	Number
Patent Number:	5211428
Patent Number:	5221570
Patent Number:	5288168
Patent Number:	5320454
Patent Number:	5401552
Patent Number:	5497097
Patent Number:	5728424
Patent Number:	5850144
Patent Number:	6054178
Patent Number:	6197398
Patent Number:	6303204
Patent Number:	6802672
Patent Number:	7186066
	PATENT

REEL: 032018 FRAME: 0862

Patent Number:	7470094
Patent Number:	7306414
Patent Number:	8192111
Patent Number:	6155446
Application Number:	11891168
Application Number:	12910961
Application Number:	13335964
Application Number:	13359662
Application Number:	13359683

CORRESPONDENCE DATA

Fax Number: (312)577-4565 Phone: 312-577-8265

Email: kristin.brozovic@kattenlaw.com

Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: KRISTIN BROZOVIC C/O KATTEN

Address Line 1: 525 W MONROE STREET
Address Line 4: CHICAGO, ILLINOIS 60661

ATTORNEY DOCKET NUMBER:	207170-435
NAME OF SUBMITTER:	KRISTIN BROZOVIC
Signature:	/Kristin Brozovic/
Date:	01/14/2014

Total Attachments: 10

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PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT, dated as of January 10, 2014 (this "Agreement"), is made by each of the entities listed on the signature pages hereof (each a "Grantor" and, collectively, the "Grantors"), in favor of General Electric Capital Corporation ("GE Capital"), as administrative agent (in such capacity, together with its successors and permitted assigns, the "Agent") for the Lenders and the L/C Issuers (as defined in the Credit Agreement referred to below) and the other Secured Parties.

WITNESSETH:

WHEREAS, pursuant to the First Lien Revolving Credit Agreement, dated as of January 10, 2014 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among GSE Environmental, Inc., a Delaware corporation (the "Borrower"), the other Credit Parties, the Lenders and the L/C Issuers from time to time party thereto and GE Capital, as Agent for the Lenders and the L/C Issuers, the Lenders and the L/C Issuers have severally agreed to make extensions of credit to the Borrower upon the terms and subject to the conditions set forth therein;

WHEREAS, each Grantor has agreed, pursuant to a First Lien Guaranty and Security Agreement of even date herewith in favor of the Agent (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "First Lien Guaranty and Security Agreement"), to guarantee the Obligations (as defined in the Credit Agreement) of the Borrower; and

WHEREAS, all of the Grantors are party to the First Lien Guaranty and Security Agreement pursuant to which the Grantors are required to execute and deliver this Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Lenders, the L/C Issuers and the Agent to enter into the Credit Agreement and to induce the Lenders and the L/C Issuers to make their respective extensions of credit to the Borrower thereunder, each Grantor hereby agrees with the Agent as follows:

- Section 1. <u>Defined Terms</u>. Capitalized terms used herein without definition are used as defined in the First Lien Guaranty and Security Agreement.
- Section 2. Grant of Security Interest in Patent Collateral. Each Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations of such Grantor, hereby mortgages, pledges and hypothecates to the Agent for the benefit of the Secured Parties, and grants to the Agent for the benefit of the Secured Parties a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral of such Grantor (other than any Excluded Property, but only during such time that such Collateral actually constitutes Excluded Property) (the "Patent Collateral"):
 - (a) all of its issued U.S. Patents and all IP Licenses providing for the grant by or to such Grantor of any right under any Patent, including, without limitation, those referred to on Schedule I hereto;

- (b) all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing; and
- (c) all income, royalties, proceeds and Liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.
- Section 3. <u>First Lien Guaranty and Security Agreement</u>. The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Agent pursuant to the First Lien Guaranty and Security Agreement and each Grantor hereby acknowledges and agrees that the rights and remedies of the Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the First Lien Guaranty and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.
- Section 4. <u>Grantor Remains Liable</u>. Each Grantor hereby agrees that, anything herein to the contrary notwithstanding, such Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their Patents subject to a security interest hereunder.
- Section 5. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart. Delivery of an executed signature page of this Agreement by facsimile transmission or Electronic Transmission shall be as effective as delivery of a manually executed counterpart hereof.
- Section 6. <u>Termination</u>. This Agreement shall terminate concurrently with the termination of the First Lien Guaranty and Security Agreement.
- Section 7. <u>Governing Law</u>. The laws of the State of New York shall govern all matters arising out of, in connection with or relating to this Agreement, including, without limitation, its validity, interpretation, construction, performance and enforcement (without regard to conflicts of law principles).
- Section 8. <u>Conflict with Other Agreements</u>. In the event of any conflict between this Agreement (or any portion thereof) and the First Lien Guaranty and Security Agreement, the First Lien Guaranty and Security Agreement shall prevail.

[SIGNATURE PAGES FOLLOW]

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

Very truly yours,

GSE ENVIRONMENTAL, LLC (f/k/a GSE Lining Technology, Inc.)

as Grantor

Name: Daniel C. Storey

Title: Senior Vice President and CFO

GSE ENVIRONMENTAL, INC.

as Grantor

Name: Daniel & Storey

Title: Senior Vice President and CFO

SYNTEC LLC

as Grantor

By GSE Environmental, LLC, its Sole Member

Bv:

ame: Daniel C. Storey

Title: Senior Vice President and CFO

ACCEPTED AND AGREED as of the date first above written:

as Agemb

GENERAL ELECTRIC CAPITAL CORPORATION

By:

Name: Title:

Brad Kimme

Duly Authorized Signatory

Signature Page to Patent Security Agreement

SCHEDULE I TO PATENT SECURITY AGREEMENT

Issued U.S. Patents:

OWNE	<u>R</u>	PATENT No.	ISSUE DATE	TITLE
GSE LLC	Environmental,	5211428	5/18/1993	Gas Pipe Slip Boot
GSE LLC	Environmental,	5221570	6/22/1993	Multilayered Coextruded Geomembrane
GSE LLC	Environmental,	5288168	2/22/1994	Method and Apparatus for Lining Outdoor Fluid Containment Areas to Facilitate Electrical Leak Detection
GSE LLC	Environmental,	5320454	6/14/1994	Method and apparatus for installing a flexible panel into a trench
GSE LLC	Environmental,	5401552	3/28/1995	Geocomposite Liner
GSE LLC	Environmental,	5497097	3/5/1996	Apparatus for detecting a connection between adjacent panels of a curtain wall
GSE LLC	Environmental,	5728424	3/17/1998	Method for forming a textured surface on a geomembrane
GSE LLC	Environmental,	5850144	12/15/1998	Method for Detecting Leaks in a Membrane
GSE LLC	Environmental,	6054178	4/25/2000	Fabric Mesh Reinforced Monolithic Thermoplastic Membrane
GSE LLC	Environmental,	6197398	3/6/2001	Earthen liner with clay seam cover
GSE LLC	Environmental,	6303204	10/16/2001	Earthen liner with clay seam cover
GSE LLC	Environmental,	6802672	10/12/2004	Leachate distribution system
GSE LLC	Environmental,	7186066	3/6/2007	Method of loading and unloading transported compressible rolls

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OWNE	<u>R</u>	PATENT NO.	ISSUE DATE	TITLE
GSE LLC	Environmental,	7470094	12/30/2008	Geonet for a Geocomposite
GSE LLC	Environmental,	7306414	12/11/2007	Method of loading and unloading transported compressible rolls
GSE LLC	Environmental,	8192111	6/5/2012	Boot for Geosynthetic Layer
GSE Techno	Lining ology, Inc.	6155446	12/5/2000	Method for encapsulating waste material and systems therefor

Pending U.S. Patent Applications:

Owner	<u>APPLN.</u> SERIAL NO.	<u>Filing</u> <u>Date</u>	TITLE
GSE Environmental, LLC	11/891168	8/9/2007	Geonet for a Geocomposite
GSE Lining Technology, LLC	12/910961	10/25/2010	Containment boom
GSE Lining Technology, LLC and Halliburton Energy Services, Inc.	13/335964	1/27/2012	Bentonite barrier compositions and methods of use in containment applications
GSE Lining Technology, LLC and Halliburton Energy Services, Inc.	13/359662	1/27/2012	Bentonite barrier compositions and related geosynthetic clay liners for use in containment applications
GSE Lining Technology, LLC and Halliburton Energy Services, Inc.	13/359683	1/27/2012	Methods of using improved bentonie barrier compositions and related geosynthetic clay liners

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U.S. Patent Licenses:

Ligengon		Ligengee	PATENT NO./ PENDING APPL. SERIAL	ISSUE DATE/ FILING	Trans p
<u>Licensor</u>		<u>Licensee</u>	<u>No.</u>	<u>Date</u>	TITLE
Poly-Flex, L.F).	GSE Environmental, Inc.	5804112	9/8/1998	Method of co-extruding a blown-film textured liner
Tenax SpA		SynTec LLC	5,891,549	4/6/1999	Sheet like structure with surface protrusions for providing spacing, grip- enhancing, draining elements and the like
Tenax SpA		SynTec LLC	6,972,269 B1	12/6/2005	Double sided geocomposite tri-planer geonet structure
Advanced Systems LLC	Geotech	SynTec LLC	6,505,996 B1		Drainage system with unitary void-maintaining geosynthetic structure
Advanced Systems LLC	Geotech	SynTec LLC	6,802,669 B2	10/12/./20 04	Void-maintaining synthetic drainable base courses and methods for extending the useful life of paved structures

Issued Foreign Patents:

OWNER	PATENT No.	<u>Grant</u> <u>Date</u>	TITLE	COUNTRY
GSE Environmental, Inc.	431199	5/13/2009	System and method for forming a textured surface on a geomembrane	Austria
GSE Environmental, Inc.	EP 901408	5/13/2009	System and method for forming a textured surface on a geomembrane	France

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Owner	PATENT No.	Grant Date	<u>Title</u>	COUNTRY
GSE Environmental, Inc.	69739401	5/13/2009	System and method for forming a textured surface on a geomembrane	Germany
GSE Environmental, Inc.	EP 901408	5/13/2009	System and method for forming a textured surface on a geomembrane	Great Britain
GSE Environmental, Inc.	EP 901408	5/13/2009	System and method for forming a textured surface on a geomembrane	Italy
GSE Lining Technology, Inc.	EP 1234078	12/21/2005	Earthen liner with clay seam cover	Great Britain
GSE Lining Technology, Inc.	60025034	12/21/2005	Earthen liner with clay seam cover	Germany
GSE Lining Technology, Inc.	2394628	11/22/2005	Earthen liner with clay seam cover	Canada
GSE Lining Technology, Inc.	2096204	2/25/1994	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Canada
GSE Lining Technology, Inc.	2655232	9/17/1997	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Japan
GSE Lining Technology, Inc.	EP 584469	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	France
GSE Lining Technology, Inc.	69301212	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Germany

OWNER	PATENT NO.	<u>Grant</u> <u>Date</u>	<u>Title</u>	COUNTRY
GSE Lining Technology, Inc.	EP 584469	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Great Britain
GSE Lining Technology, Inc.	3019300	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Greece
GSE Lining Technology, Inc.	EP 584469	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Italy
GSE Lining Technology, Inc.	2083796	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Spain
GSE Lining Technology, Inc.	EP 584469	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Switzerland/Liec htenstein
GSE Lining Technology, Inc.	EP 584469	1/3/1996	Method and apparatus for lining outdoor fluid containment areas to facilitate electrical leak detection	Netherlands

Pending Foreign Patent Applications:

<u>Owner</u>		APPLN. SERIAL <u>No.</u>	<u>Filing</u> <u>Date</u>	<u>Title</u>	COUNTRY
GSE Technology	\mathcal{C}	PCT/US2010/0 35576	5/20/2010	Boot for Geosynthetic Layer	WIPO

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OWNER		APPLN. SERIAL No.	<u>Filing</u> <u>Date</u>	TITLE		COUNTRY
GSE Technology	Lining Inc.	06255739.2	11/8/2006	Geonet geocomposi	for a te	European Patent
GSE Technology	Lining Inc.	04001770.9	1/27/2004	Leachate system	distribution	European Patent
GSE Technology	Lining Inc.	PA/a/2004/000 851	1/28/2004	Leachate system	distribution	Mexico
GSE Technology	Lining Inc.	2004114	1/30/2004	Leachate system	distribution	Peru

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