# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ic Version v1.1 EPAS ID: PAT4791890

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
ROBERT D. CHAMBERS	10/28/2016
ALAN E. BOWSER JR.	10/28/2016
KEVIN D. PENDLETON	11/07/2016
LOU CAROLLA	10/28/2016

## **RECEIVING PARTY DATA**

Name:	FOSBEL, INC.
Street Address:	20600 SHELDON ROAD
City:	BROOK PARK
State/Country:	OHIO
Postal Code:	44142

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14859820

## **CORRESPONDENCE DATA**

**Fax Number:** (703)816-4100

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 7038164000

Email: PTOMail@nixonvan.com
Correspondent Name: BRYAN H. DAVIDSON
Address Line 1: NIXON & VANDERHYE P.C.

Address Line 2: 901 NORTH GLEBE ROAD, 11TH FLOOR

Address Line 4: ARLINGTON, VIRGINIA 22203

ATTORNEY DOCKET NUMBER:	BHD-6141-35
NAME OF SUBMITTER:	BRYAN H. DAVIDSON
SIGNATURE:	/Bryan H. Davidson/
DATE SIGNED:	01/24/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 4** 

PATENT REEL: 044719 FRAME: 0732

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PATENT REEL: 044719 FRAME: 0733

Document Description: Oath or declaration filed

Attorney Docket Number BHD-6141-35
First Named Inventor CHAMBERS, Robert D.

	First Named Inventor   CHAMBERS, Robert D.	
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OF USING AN APPLICATION DATA SHE		
Declaration Submitted With Initial Filing  OR		
Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.1	f6(f)) required)	
METHODS AND APPARATUS FOR CONSTRUCTING GLA	ASS FURNACE STRUCTURES	
(Title of the Invention)		
As a below named inventor, I hereby declare that:		
This declaration is directed to:  ☐ the attached application, or  ☐ United States Application Number 14/859,820 filed September 21, 2  ☐ PCT International application number filed on	2015, or	
The above-identified application was made or authorized to be made by me.		
I believe I am the original inventor or an original joint inventor of a claimed inven	ntion in the application.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention i	in the Application identified above.	
WHEREAS, Fosbel, Inc. (hereinafter ASSIGNEE), a corporation of the State of OH, having an office and place of business at 20600 Sheldon Road, Brook Park, OH 44142, is desirous of acquiring an interest therein;		
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;		
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;		
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors to ASSIGNEE'S full protection and title in and to the invention hereby transferred	s, assigns, and legal representatives, deemed essential d; and	
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.		
AGREED and executed as noted below:		
LEGAL NAME OF INVENTOR/JOINT INVENTOR: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)	~	
Robert D	) CHAMBERS	
Inventor's Signature:	Date: October 28, 2016	

REEL: 044719 FRAME: 0734

Document Description: Oath or declaration filed

BHD-6141-35 Attorney Docket Number CHAMBERS, Robert D. First Named Inventor

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INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN USING AN APPLICATION DATA SHEET (37 C		
Declaration Submitted With Initial Filing OR		
Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) requ	uired)	
METHODS AND APPARATUS FOR CONSTRUCTING GLASS FUR	NACE STRUCTURES	
(Title of the Invention)		
As a below named inventor, I hereby declare that:		
This declaration is directed to:  ☐ the attached application, or  ☐ United States Application Number 14/859,820 filed September 21, 2015, or ☐ PCT International application number filed on .		
The above-identified application was made or authorized to be made by me.		
I believe I am the original inventor or an original joint inventor of a claimed invention in the	application.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the App	lication identified above.	
WHEREAS, Fosbel, Inc. (hereinafter ASSIGNEE), a corporation of the State of OH, having an office and place of business at 20600 Sheldon Road, Brook Park, OH 44142, is desirous of acquiring an interest therein;		
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;		
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;		
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and		
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.		
AGREED and executed as noted below:		
Legal Name of Additional Joint Inventor, if any:		
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)  Alan E.	BOWSER, JR.	
Inventor's Signature:	Date: /0-28-16	
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;  ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and  ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filling and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.  AGREED and executed as noted below:  Legal Name of Additional Joint Inventor, if any:  (E.g., Given Name (first and middle (if any)) and Family Name or Surname)  Alan  E.  BOWSER, JR.  Inventor's Signature:		

**REEL: 044719 FRAME: 0735** 

Document Description: Oath or declaration filed

Attorney Docket Number BHD-6141-35

First Named Inventor CHAMBERS, Robert D.

INDICATION OF ADATION AND ACCIONMENT COD HTH ITV OD DECION DATENT ADDITION (37 CED 4 22)		
INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)  USING AN APPLICATION DATA SHEET (37 CFR 1.76)		
Declaration Submitted With Initial Filing		
OR  Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required)		
7		
METHODS AND APPARATUS FOR CONSTRUCTING GLASS FURNACE STRUCTURES		
(Title of the Invention)		
As a below named inventor, I hereby declare that:		
This declaration is directed to:  the attached application, or  United States Application Number 14/859,820 filed September 21, 2015, or  PCT International application number filed on		
The above-identified application was made or authorized to be made by me.		
I believe I am the original inventor or an original joint inventor of a claimed invention in the application.		
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the Application identified above.		
WHEREAS, Fosbel, Inc. (hereinafter ASSIGNEE), a corporation of the State of OH, having an office and place of business at 20600 Sheldon Road, Brook Park, OH 44142, is desirous of acquiring an interest therein;		
NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;		
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;		
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and		
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.		
AGREED and executed as noted below:		
Legal Name of Additional Joint Inventor, if any:		
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)  Kevin  PENDLETON		
Inventor's Signature: Au Date:  11/4/16		

REEL: 044719 FRAME: 0736

Document Description: Oath or declaration filed

BHD-6141-35 Attorney Docket Number CHAMBERS Robert D

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INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGNOR OF THE STREET (37 (37 (27 ) )		
Declaration Submitted With Initial Filing		
OR  Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required)		
METHODS AND APPARATUS FOR CONSTRUCTING GLASS FUR	NACE STRUCTURES	
(Title of the Invention)		
As a below named inventor, I hereby declare that:		
This declaration is directed to:  the attached application, or  United States Application Number 14/859,820 filed September 21, 2015, or  PCT International application number filed on		
The above-identified application was made or authorized to be made by me.		
I believe I am the original inventor or an original joint inventor of a claimed invention in the	application.	
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.		
WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the App	lication identified above.	
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NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE's attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;		
ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;		
ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and		
ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.		
AGREED and executed as noted below:		
Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)		
Lou CAROLLA		
Inventor's Signature: Laris Carolla	Date: /0/28//6	

**RECORDED: 01/24/2018 REEL: 044719 FRAME: 0737**