

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	RESUBMISSION
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>RESUBMIT DOCUMENT ID:</b>	505752711
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SCOTT WEIL	10/01/2019
ZHONGMING WANG	10/21/2019
ROGER P SMITH	10/01/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	OWENS-BROCKWAY GLASS CONTAINER INC.
<b>Street Address:</b>	ONE MICHAEL OWENS WAY
<b>City:</b>	PERRYSBURG
<b>State/Country:</b>	OHIO
<b>Postal Code:</b>	43551
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16590062
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	567-336-7897
<b>Email:</b>	patents@o-i.com
<b>Correspondent Name:</b>	STEPHEN L. SCHARF
<b>Address Line 1:</b>	ONE MICHAEL OWENS WAY
<b>Address Line 4:</b>	PERRYSBURG, OHIO 43551
<b>ATTORNEY DOCKET NUMBER:</b>	19517
<b>NAME OF SUBMITTER:</b>	STEPHEN L. SCHARF
<b>SIGNATURE:</b>	/Stephen L. Scharf/
<b>DATE SIGNED:</b>	02/25/2020
<b>Total Attachments: 3</b>	
source=19517Assignment-Weil#page1.tif	
source=19517Assignment-Wang#page1.tif	
source=Assignment-Smith#page1.tif	

ASSIGNMENT

WHEREAS, I, Scott Weil of 26400 Fort Meigs Rd., Apt. 18, Perrysburg, OH 43881, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Selective Chemical Fining of Small Bubbles in Glass" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on October 1, 2019 and thereafter received a USPTO Serial Number of 16/590,062

AND WHEREAS, Owens-Illinois Glass Container Inc., hereinafter referred to as ASSIGNEE, a corporation organized and existing under the laws of the state of Delaware and having a place of business located at One Michael Owens Way, Perrysburg, Ohio 43881-2999, U.S.A., is desirous of acquiring the entire right, title and interest in and to said invention as described in said application including all patentable subject matter disclosed in said application.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as ASSIGNOR, do hereby sell, assign, transfer and convey unto ASSIGNEE, my entire right, title and interest, including all priority rights in the United States of America and all countries foreign thereto and under any or all International Conventions associated with each of said foreign countries, in and to: (A) said invention as described in said application, (B) said application and any continuation or continuation-in-part application(s) of said application including all patentable subject matter disclosed therein, (C) any United States Patent(s) including any reissue, re-examination, extension or renewal of said United States Patent(s) that may be granted in pursuance of said application(s), (D) any foreign patent application(s) that may be filed on said invention, or based on said application(s), in organizations or countries foreign to the United States of America, and (E) any foreign patent(s) granted on said foreign patent application(s).

I, as ASSIGNOR, hereby agree, without any additional consideration, to cooperate with and to assist ASSIGNEE in the filing and prosecution of said application(s) and to perform any other acts as ASSIGNEE or its successors, assigns, designees or legal representatives may deem necessary to secure to ASSIGNEE the rights and interest herein assigned and to acquire, hold, enforce, convey and uphold validity of any of said patent(s), and upon request, to execute all papers including those required for said application(s) or said patent(s). I, as ASSIGNOR, hereby represent and warrant that I have not granted any right, title or interest that would be inconsistent with the right, title and interest granted herein.

I, as ASSIGNOR, hereby authorize ASSIGNEE and its legal representatives to apply for foreign patents based on said invention or on said application(s), in ASSIGNEE'S own name or through its successors, assigns, designees, legal representatives, subsidiaries or related companies, under an International Convention or otherwise, and to enter into the appropriate spaces above in this ASSIGNMENT document, the filing date and USPTO Serial Number of said application for United States Patent, when known.

I, as ASSIGNOR, hereby authorize and request the Commissioner of Patents of the USPTO to issue any of said United States Patents to ASSIGNEE of the entire right, title and interest in and to any of said applications or United States Patents for the sole use and behoof of ASSIGNEE in the full ends of the respective terms for which said patent is granted.

I, as ASSIGNOR, hereby authorize and request the Commissioner of Patents (or the equivalent) in any organizations or countries foreign to the United States of America to issue any said foreign patent(s) to ASSIGNEE of the entire right, title and interest in and to any of said foreign patent application(s) or foreign patent(s) for the sole use and behoof of ASSIGNEE to the full ends of the respective terms for which said patent is granted.

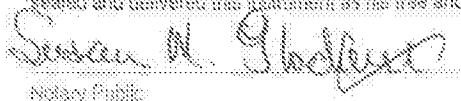
This ASSIGNMENT is governed by and is to be construed in accordance with the laws of the State of Ohio, U.S.A. No representations, warranties, collateral assignments or conditions affecting this ASSIGNMENT are valid other than those expressed in this ASSIGNMENT. ASSIGNOR agrees that the provisions of this ASSIGNMENT are fully binding on ASSIGNOR and that ASSIGNOR'S respective heirs, executors, assigns and administrators have no right, title or interest in any of said applications, inventions or patents whatsoever.

IN WITNESS WHEREOF, the undersigned ASSIGNOR has caused his name to be subscribed hereto this 1 day of October, 2019.

ASSIGNOR SIGNATURE:   
ASSIGNOR NAME: Scott Weil

STATE OF OHIO )  
COUNTY OF WOOD )

On this 1st day of October, 2019, before me, the undersigned Notary Public in and for Wood County, State of Ohio, U.S.A., personally appeared Scott Weil who is known to me to be the same person whose name is subscribed above to this instrument, and who acknowledged that he has signed, sealed and delivered this instrument as his free and voluntary act for the purposes herein set forth.

  
Notary Public

**ASSIGNMENT**

WHEREAS, I Zhongming Wang of 4666 Sycamore Dr., Ypsilanti, MI 48197, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Selective Chemical Firing of Small Bubbles in Glass" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on October 1, 2011 and thereafter received a USPTO Serial Number of 161,090,000

AND WHEREAS, Owens-Brockway Glass Container Inc., hereinafter referred to as ASSIGNEE, a corporation organized and existing under the laws of the state of Delaware and having a place of business located in One Michael Owens Way, Perrysburg, Ohio 43061-2888, U.S.A., in pursuit of acquiring the entire right, title and interest in and to said invention as described in said application including all patentable subject matter disclosed in said application.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as ASSIGNOR, do hereby sell, assign, transfer and convey unto ASSIGNEE, my entire right, title and interest, including all priority rights in the United States of America and all countries foreign thereto and under any or all International Conventions associated with each of said foreign countries, in and to: (A) said invention as described in said application, (B) said application and any continuation or continuation-in-part application(s) of said application including all patentable subject matter disclosed therein, (C) any United States Patent(s) including any issuance, re-examination, extension or renewal of said United States Patent(s) that may be granted in pursuance of said application(s), (D) any foreign patent application(s) that may be filed on said invention, or based on said application(s), in organizations or countries foreign to the United States of America, and (E) any foreign patent(s) granted on said foreign patent application(s).

I, as ASSIGNOR, hereby agree, without any additional consideration, to cooperate with and to assist ASSIGNEE in the filing and prosecution of said application(s) and to perform any other act, as ASSIGNEE or its successors, assigns, designers or legal representatives may deem necessary to secure to ASSIGNEE the rights and interest herein assigned and to acquire, hold, enforce, convey and uphold validity of any of said patent(s), and upon request, to execute all papers including those required for said application(s) or said patent(s). I, as ASSIGNOR, hereby represent and warrant that I have not granted any right, title or interest that would be inconsistent with the right, title and interest granted herein.

I, as ASSIGNOR, hereby authorize ASSIGNEE and its legal representatives to apply for foreign patents based on said invention or on said application(s), in ASSIGNEE'S own name or through its successors, assigns, designers, legal representatives, subsidiaries or related companies, under an International Convention or otherwise, and to enter into the appropriate spaces above in this ASSIGNMENT document, the filing date and USPTO Serial Number of said application for United States Patent, when known.

I, as ASSIGNOR, hereby authorize and request the Commissioner of Patents of the USPTO to issue any of said United States Patents to ASSIGNEE of the entire right, title and interest in and to any of said applications or United States Patents for the sole use and behoof of ASSIGNEE to the full ends of the respective terms for which said patent is granted.

I, as ASSIGNOR, hereby authorize and request the Commissioner of Patents (or the equivalent) in any organizations or countries foreign to the United States of America to issue any said foreign patent(s) to ASSIGNEE of the entire right, title and interest in and to any of said foreign patent application(s) or foreign patent(s) for the sole use and behoof of ASSIGNEE to the full ends of the respective terms for which said patent is granted.

This ASSIGNMENT is governed by and is to be construed in accordance with the laws of the State of Ohio, U.S.A. No representations, warranties, collateral assignments or conditions affecting this ASSIGNMENT are valid other than those expressed in this ASSIGNMENT. ASSIGNOR agrees that the provisions of this ASSIGNMENT are fully binding on ASSIGNOR and that ASSIGNOR'S respective heirs, executors, assigns and administrators have no right, title or interest in any of said applications, inventions or patents whatsoever.

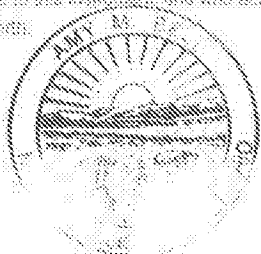
(IN WITNESS WHEREOF, the undersigned ASSIGNOR has caused his name to be subscribed hereto this 21 day of Oct., 2011.

ASSIGNOR SIGNATURE: Zhongming Wang  
ASSIGNOR NAME: Zhongming Wang

STATE OF OHIO )  
COUNTY OF WOOD )

On this 21 day of October, 2011, before me, the undersigned Notary Public in and for Wood County, State of Ohio, U.S.A., personally appeared Zhongming Wang who is known to me to be the same person whose name is subscribed above to this instrument, and who acknowledged that he has signed, sealed and delivered this instrument as his free and voluntary act for the purposes herein set forth.

Amy M. Bell  
Notary Public



AMY M. BELL  
NOTARY PUBLIC  
STATE OF OHIO

Commission Expires  
May 12, 2020

ASSIGNMENT

WHEREAS, I, Roger P. Smith of 820 Bridgeton Ln., Perrysburg, OH 43551, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Selective Chemical Fining of Small Bubbles in Glass" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on October, 2019 and thereafter received a USPTO Serial Number of 16/590,062

AND WHEREAS, Owens-Brockway Glass Container Inc., hereinafter referred to as ASSIGNEE, a corporation organized and existing under the laws of the state of Delaware and having a place of business located at One Michael Owens Way, Perrysburg, Ohio 43551-2999, U.S.A., is desirous of acquiring the entire right, title and interest in and to said invention as described in said application including all patentable subject matter disclosed in said application.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as ASSIGNOR, do hereby sell, assign, transfer and convey unto ASSIGNEE, my entire right, title and interest, including all priority rights in the United States of America and all countries foreign thereto and under any or all International Conventions associated with each of said foreign countries, in and to: (A) said invention as described in said application, (B) said application and any continuation or continuation-in-part application(s) of said application including all patentable subject matter disclosed therein, (C) any United States Patent(s) including any reissue, re-examination, extension or renewal of said United States Patent(s) that may be granted in pursuance of said application(s), (D) any foreign patent application(s) that may be filed on said invention, or based on said application(s), in organizations or countries foreign to the United States of America, and (E) any foreign patent(s) granted on said foreign patent application(s).

I, as ASSIGNOR, hereby agree, without any additional consideration, to cooperate with and to assist ASSIGNEE in the filing and prosecution of said application(s) and to perform any other acts as ASSIGNEE or its successors, assigns, designees or legal representatives may deem necessary to secure to ASSIGNEE the rights and interest herein assigned and to acquire, hold, enforce, convey and uphold validity of any of said patent(s), and upon request, to execute all papers including those required for said applications(s) or said patents(s). I, as ASSIGNOR, hereby represent and warrant that I have not granted any right, title or interest that would be inconsistent with the right, title and interest granted herein.

I, as ASSIGNOR, hereby authorize ASSIGNEE and its legal representatives to apply for foreign patents based on said invention or on said application(s), in ASSIGNEE'S own name or through its successors, assigns, designees, legal representatives, subsidiaries or related companies, under an International Convention or otherwise, and to enter into the appropriate spaces above in this ASSIGNMENT document, the filing date and USPTO Serial Number of said application for United States Patent, when known.

I, as ASSIGNOR, hereby authorize and request the Commissioner of Patents of the USPTO to issue any of said United States Patents to ASSIGNEE of the entire right, title and interest in and to any of said applications or United States Patents for the sole use and behoof of ASSIGNEE to the full ends of the respective terms for which said patent is granted.

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IN WITNESS WHEREOF, the undersigned ASSIGNOR has caused his name to be subscribed hereto this 5<sup>th</sup> day of OCTOBER, 2019.

ASSIGNOR SIGNATURE: [Signature]  
ASSIGNOR NAME: Roger P. Smith

STATE OF OHIO )  
COUNTY OF WOOD )

On this 5<sup>th</sup> day of October, 2019, before me, the undersigned Notary Public in and for Wood County, State of Ohio, U.S.A., personally appeared Roger P. Smith who is known to me to be the same person whose name is subscribed above to this instrument, and he acknowledged that he has signed, sealed and delivered this instrument as his free and voluntary act for the purposes herein set forth.

[Signature]  
Notary Public



**AMY M. BELL**  
NOTARY PUBLIC  
STATE OF OHIO

My Commission Expires  
May 12, 2020

**PATENT**