# 506305458 10/15/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6352207

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
SHIVAKUMAR S KADUR	03/26/2018
CARL LUCAS FAYERWEATHER	03/21/2018
KEVIN XIN YU	04/09/2018
ZHONGMING WANG	03/21/2018
DINESH GERA	04/05/2018

#### **RECEIVING PARTY DATA**

Name:	OWENS-BROCKWAY GLASS CONTAINER INC.	
Street Address:	ONE MICHAEL OWENS WAY	
City:	PERRYSBURG	
State/Country:	OHIO	
Postal Code:	43551	

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

Property Type	Number
Application Number:	17034857

### **CORRESPONDENCE DATA**

Fax Number:

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.

**Email:** patents@o-i.com

Correspondent Name: STEPHEN L. SCHARF

Address Line 1: ONE MICHAEL OWENS WAY
Address Line 4: PERRYSBURG, OHIO 43551

ATTORNEY DOCKET NUMBER:	19349-01
NAME OF SUBMITTER:	STEPHEN L. SCHARF
SIGNATURE:	/Stephen L. Scharf/
DATE SIGNED:	10/15/2020

**Total Attachments: 5** 

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PATENT 506305458 REEL: 054068 FRAME: 0944

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> PATENT REEL: 054068 FRAME: 0945

# <u>ASSIGNMENT</u>

WHEREAS, I, Shivakumar S. Kadur of, 4950 Prestonwood Rd., Perrysburg, Ohio 43551, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Rapid Melting of Glass Batch in Traditional Glass Furnace for which an application for a United States Patent & Trademark Office (USPTO) on March 15, 2018 and thereafter received a USPTO Serial Number of 15/922,549;

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.

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 26 day of March, 2018.

ASSIGNOR SIGNATURE:

ASSIGNOR NAME:

Shivakumar S. Kadur

STATE OF OHIO )
COUNTY OF WOOD )

On this day of March, 2018, before me, the undersigned Notary Public in and for Wood County, State of Ohio, U.S.A., personally appeared Shivakumar S. Kadur 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.

Motani Dunia

NOTARY PUBLIC STATE OF OHIO

My Commission Expires
May 12, 20 2

**PATENT** 

REEL: 054068 FRAME: 0946

WHEREAS, I, Carl Lucas Fayerweather of, 728 E. Carlsbrook Drive, Maumee, OH 43537, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Rapid Meiting of Glass Batch in Traditional Glass Furnace" for which an application for a United States Patent & Trademark Office (USPTO) on March 15, 2018 and thereafter received a USPTO Serial Number of 15/922,549;

AND WHEREAS, Owens-Brookway 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, Perryaburg, 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 releasue, 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 filling 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 safe 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

🚣 day of March, 2018

ASSIGNOR SIGNATURE A

ASSIGNOR NAME:

Carl Lucas Fayerwealing

STATE OF OHIO )
COUNTY OF WOOD )

On this Aday of March, 2018, before me, the undersigned Notary Public in and for Wood County, State of Ohio, U.S.A., personally appeared Carl Lucas Fayerweather who was not be the same person whose name is subscribed above to this instrument, and who acknowledged that he has signed, sealed and delivered this distrument as his free and voluntage act for the purposes herein set forth.

Notary Public

AMY M. BELL

NOTARY PUBLIC STATE OF OHIO

My Commission Expires
May 12, 20

PATENT REEL: 054068 FRAME: 0947

WHEREAS, I, Kevin Xin Yu of, 171 Cimarron Dr., Moon Township, PA 15188, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Rapid Melting of Glass Batch in Traditional Glass Furnace" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on March 15, 2018 and thereafter received a USPTO Serial Number of 15/922,549;

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.

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, little 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 Zifaday of April,

\_ASSIGNOR.SIGNATURE: - ASSIGNOR.NAME:

Kevin Xin Yu

STATE OF PENNSYLVANIA

COUNTY OF ALLEGHENY

On this It day of April, 2018, before me, the undersigned Notary Public in and for Alleghen County, State of Pennsylvania, U.S.A., personally appeared Kevin Xin Yu 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, scaled and delivered this instrument as his free and vojuntary act for the purposes herein set forth.

Notary Public

COMMONWEALTH OF PENNSYLVANIA

NOTARIAL SEAL
Terri L. Duda, Notary Public
Robinson Twp., Allegheny County
My Commission Expires Oct. 28, 2020
NEWBER PENNSYLVANIA ASSOCIATION OF NOTARIES

WHEREAS, I. Zhongming Wang of, 4686 Sycamore Dr., Ypsilanti, Michigan 48197, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Rapid Melting of Glass Batch in Traditional Glass Furnace" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on March 15, 2018 and thereafter received a USPTO Serial Number of 15/922,549;

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.

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 March, 2018.

ASSIGNOR SIGNATURE:

ASSIGNOR NAME:

STATE OF OHIO COUNTY OF WOOD )

On this Adamsi March, 2018, 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 his to be the same person whose name is subscribed above to this instrument, and who acknowledged that he has signed, sealed and delivered this an Tales Trust

instrument as his free and voluntary act for the purposes herein set forth.

Notary Public

AMY M. BELL

NOTARY PUBLIC STATE OF OHIO

My Commission Expires May 12, 20

**PATENT** 

REEL: 054068 FRAME: 0949

WHEREAS, I, Dinesh Gera of 5966 Porsha Dr., Sylvania, Ohio 43560, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Rapid Melting of Glass Batch in Traditional Glass Furnace" for which an application for a United States Patent was filled in the United States Patent & Trademark Office (USPTO) on March 15, 2018 and thereafter received a USPTO Serial Number of 15/922,549;

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 filled 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 filling 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.

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 \_\_5\_ day of April, 2018,

ASSIGNOR SIGNATURE: ASSIGNOR NAME:

Dinesh Gera

STATE OF OHIO LUCAS }

On this 5 day of April, 2018, before me, the undersigned Notary Public in and for 45 County, State of Ohio, U.S.A., personally appeared Dinesh Gera 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

ALISON HESS

Notary Public, State of Ohio My Commission Expires September 21, 2021

**PATENT** 

REEL: 054068 FRAME: 0950

**RECORDED: 10/15/2020**