

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4176778

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
VARUN MUKHEJA	10/26/2016
SCOTT COOPER	10/26/2016
TILAK GULLINKALA	10/27/2016
<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>	15284263
<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>	567-336-7309
<b>Email:</b>	jennifer.pasztor@o-i.com
<b>Correspondent Name:</b>	SUSAN L. SMITH
<b>Address Line 1:</b>	ONE MICHAEL OWENS WAY
<b>Address Line 4:</b>	PERRYSBURG, OHIO 43551
<b>ATTORNEY DOCKET NUMBER:</b>	19359
<b>NAME OF SUBMITTER:</b>	SUSAN L. SMITH
<b>SIGNATURE:</b>	/SusanLSmith/
<b>DATE SIGNED:</b>	12/08/2016
<b>Total Attachments: 3</b>	
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source=19359Assignment#page2.tif	
source=19359Assignment#page3.tif	

**ASSIGNMENT**

WHEREAS, I, **Varun Mukheja, 5600 Cresthaven Lane, Apt 11, Toledo, OH 43614 US** hereinafter referred to as ASSIGNOR, together with Scott Cooper and Tilak Gullinkala have invented certain improvements in an invention entitled "**Glass Precursor Gel and Methods to Treat with Microwave Energy**" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on October 3, 2016 and thereafter received a USPTO Serial Number 15/284,263.

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<sup>th</sup> day of October, 2016.

ASSIGNOR SIGNATURE: Varun Mukheja

ASSIGNOR NAME: Varun Mukheja

STATE OF OHIO )  
COUNTY OF WOOD )

On this 26<sup>th</sup> day of October, 2016, before me, the undersigned Notary Public in and for WOOD County, State of OHIO, U.S.A., personally appeared **Varun Mukheja** 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



AMY M. BELL

NOTARY PUBLIC  
STATE OF OHIOMy Commission Expires  
May 12, 2020

**PATENT**  
**REEL: 040604 FRAME: 0384**

**ASSIGNMENT**

WHEREAS, I, **Scott P. Cooper** of **7036 Sandy Springs Road, Maumee, Ohio 43537, US** hereinafter referred to as ASSIGNOR, together with Varun Mukheja and Tilak Gullinkala have invented certain improvements in an invention entitled "**Glass Precursor Gel and Methods to Treat with Microwave Energy**" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on October 3, 2016 and thereafter received a USPTO Serial Number 15/284,263.

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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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 October, 2016.

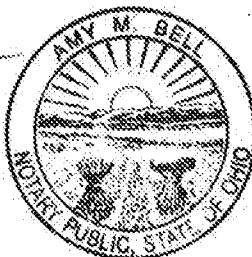
ASSIGNOR SIGNATURE: Scott P. Cooper

ASSIGNOR NAME: Scott P. Cooper

STATE OF OHIO )  
COUNTY OF WOOD )

On this 26th day of October, 2016, before me, the undersigned Notary Public in and for WOOD County, State of OHIO, U.S.A., personally appeared **Scott P. Cooper** 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**

My Commission Expires  
May 12, 2020

ASSIGNMENT

WHEREAS, I, **Tilak Gullinkala** of **13319 Roachton Road, Apt 7, Perrysburg, Ohio 43551, US** hereinafter referred to as **ASSIGNOR**, together with **Scott Cooper** and **Varun Mukheja** have invented certain improvements in an invention entitled "**Glass Precursor Gel and Methods to Treat with Microwave Energy**" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on October 3, 2016 and thereafter received a USPTO Serial Number 15/284,263.

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 27<sup>th</sup> day of October, 2016.

ASSIGNOR SIGNATURE: \_\_\_\_\_

ASSIGNOR NAME: \_\_\_\_\_

*Tilak Gullinkala*  
Tilak Gullinkala

STATE OF OHIO )  
COUNTY OF WOOD )

On this 27<sup>th</sup> day of October 2016, before me, the undersigned Notary Public in and for WOOD County, State of OHIO, U.S.A., personally appeared **Tilak Gullinkala** 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



**AMY M. BELL**

**NOTARY PUBLIC  
STATE OF OHIO**

My Commission Expires  
May 12, 2020

**PATENT**

**RECORDED: 12/08/2016**

**REEL: 040604 FRAME: 0386**