

ASSIGNMENT

WHEREAS, I, **Shane T. Rashley** of 1801 Waterford Drive, Bowling Green, OH 43402, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "**Multi-Chamber Submerged Combustion Melter and System**" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on July 10, 2019 and thereafter received a USPTO Serial Number of 16/509128;

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 16 day of July, 2019.

ASSIGNOR SIGNATURE

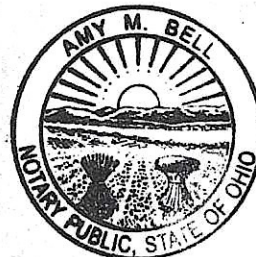
ASSIGNOR NAME:

Shane T. Rashley
Shane T. Rashley

STATE OF OHIO)
COUNTY OF WOOD)

On this 16th day of July, 2019, before me, the undersigned Notary Public in and for Wood County, State of Ohio, U.S.A., personally appeared **Shane T. Rashley** 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 OHIOMy Commission Expires
May 12, 2020

ASSIGNMENT

WHEREAS, I, Zhongming Wang of 4686 Sycamore Dr., Ypsilanti, MI 48197, US hereinafter referred to as ASSIGNOR, has invented certain improvements in an invention entitled "Multi-Chamber Submerged Combustion Melter and System" for which an application for a United States Patent was filed in the United States Patent & Trademark Office (USPTO) on July 11, 2019 and thereafter received a USPTO Serial Number of 16/509120;

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 17 day of July, 2019.

ASSIGNOR SIGNATURE: Zhongming WangASSIGNOR NAME: Zhongming Wang

STATE OF OHIO)
COUNTY OF WOOD)

On this 17th day of July, 2019, 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.

[Signature]
Notary Public



AMY M. BELL
NOTARY PUBLIC
STATE OF OHIO

My Commission Expires
May 12, 20 20