505160694 10/26/2018

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT5207461 Electronic Version v1.1

Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHRIDHAR GOPALAN	07/01/2014
GREGORY RUSSELL	07/01/2014
EVAN HARTRANFT	07/01/2014

RECEIVING PARTY DATA

Name:	DLHBOWLES, INC.
Street Address:	2422 LEO AVENUE, SW
City:	CANTON
State/Country:	ОНЮ
Postal Code:	44706

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15819384

CORRESPONDENCE DATA

Fax Number: (216)348-5474

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: 216-348-5400

Email: ipmailbox@mcdonaldhopkins.com

MCDONALD HOPKINS LLC **Correspondent Name:** Address Line 1: 600 SUPERIOR AVENUE, EAST

Address Line 2: **SUITE 2100**

Address Line 4: CLEVELAND, OHIO 44114-2653

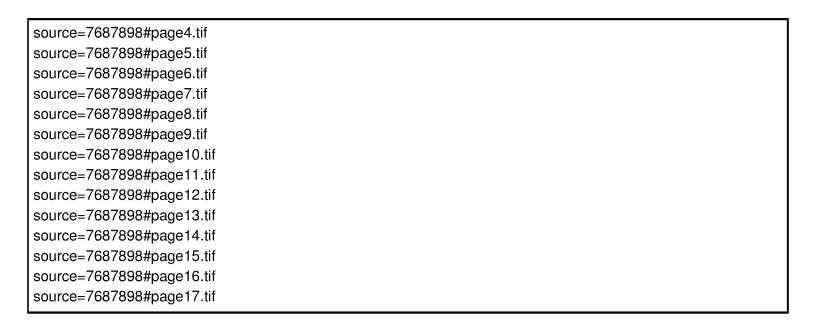
ATTORNEY DOCKET NUMBER:	42989-00279
NAME OF SUBMITTER:	MARK J. MASTERSON
SIGNATURE:	/Mark J. Masterson/
DATE SIGNED:	10/26/2018

Total Attachments: 17 source=7687898#page1.tif source=7687898#page2.tif

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PATENT REEL: 047323 FRAME: 0262

505160694



PATENT REEL: 047323 FRAME: 0263 For: Patent Application

By: Inventors

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS, the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNORS:

Mr. Shridhar Gopalan 3105 Cardinal Drive Westminster, MD 21157 Nationality: U.S.

Mr. Gregory Russell 34 Overbrook Road Catonsville, MD 21228 Nationality: U.S.

Mr. Evan Hartranft 3014 Tanbark Lane Baltimore, MD 20715 Nationality: U.S.

hereby sell, assign and transfer to

ASSIGNEE:

Bowles Fluidics Corporation 6625 Dobbin Road Columbia, MD 21045 Nationality: U.S.

and the successors, assigns and legal representatives of the ASSIGNEE the entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled:

Cup-shaped Fluidic Circuit, Nozzle Assembly and Method

and which is found in (37 C.F.R. § 3.21) U.S. provisional 61/476,845, a PCT application PCT/US12/34293, a national phase applications US 13/816,661, a CIP application 13/840,981, a design application 29/461,460 naming the above inventors, for the above-entitled invention and, in and to, all

Assignment of Invention—Multiple Inventors—page 1 of 2

Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

To comply with 37 C.F.R. § 3.21 for recordal of this assignment, We, ASSIGNORS signing below, hereby authorize and request our attorney to insert below the filing date and application number when they become known.

IN WITNESS WHEREOI	, We have hereunto se	t hand and seal this	s da;	y of July	2014
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Date: 7 / / /14

Date: $\frac{\mathcal{I}}{|\mathcal{I}|}$ /14

Signature of Shridhar Gonalan

Signature of Gregory Russell

Signature of Evan Hartranft

State of Maryland Department of **Assessments and Taxation**

Charter Division



Larry Hogan Governor

Sean P. Powell. Director

Date: 01/13/2016

THE CORPORATION TRUST INCORPORATED 351 W CAMDEN ST BALTIMORE MD 21201-7912

THIS LETTER IS TO CONFIRM ACCEPTANCE OF THE FOLLOWING FILING:

DEPARTMENT ID

: D00066233

TYPE OF REQUEST

: ARTICLES OF MERGER

DATE FILED

: 01-08-2016

TIME FILED

: 04:40 PM

RECORDING FEE

: \$100.00

EXPEDITED FEE

: \$50.00

FILING NUMBER

: 1000362008940217

CUSTOMER ID

: 0003365025

WORK ORDER NUMBER : 0004581603

PLEASE VERIFY THE INFORMATION CONTAINED IN THIS LETTER. NOTIFY THIS DEPARTMENT IN WRITING IF ANY INFORMATION IS INCORRECT. INCLUDE THE CUSTOMER ID AND THE WORK ORDER NUMBER ON ANY INQUIRIES.

Charter Division Baltimore Metro Area (410) 767-1350 Outside Metro Area (888) 246-5941

0009958455

CACCPT

ENTITY TYPE:

ORDINARY BUSINESS - STOCK

STOCK:

CLOSE:

U

PRINCIPAL OFFICE: 6625 DOBBIN ROAD

COLUMBIA MD 21045

RESIDENT AGENT:

THE CORPORATION TRUST INCORPORATED

351 WEST CAMDEN STREET BALTIMORE MD 21201-7912

COMMENTS:

THIS AMENDMENT RECORD INDICATES THE MERGER INVOLVING THE FOLLOWING ENTITIES:

THE SURVIVING ENTITY:

DLH INDUSTRIES, INC. (AN OHIO CORPORATION).

MERGED ENTITIES:

(D00066233) BOWLES FLUIDICS CORPORATION.

PATENT REEL: 037696 FRAME: 0267

ARTICLES OF MERGER

of

Bowles Fluidics Corporation

(a Maryland corporation)

with and into

DLH Industries, Inc.

(an Ohio corporation)

THIS IS TO CERTIFY THAT:

FIRST: DLH Industries, Inc., an Ohio corporation, (the "Successor Corporation") and Bowles Fluidics Corporation, a Maryland corporation (the "Merging Corporation"), being the corporations that are the parties to these Articles of Merger, do hereby agree to effect a merger (the "Merger") of said corporations upon the terms and conditions set forth herein and contemplated by the Agreement and Plan of Merger, dated December 31, 2015, among DLH Acquisition Sub, Inc., a Delaware corporation ("Acq Sub"), the Merging Corporation and the Successor Corporation (the "Merger Agreement").

SECOND: The Merging Corporation is a corporation incorporated in the State of Maryland under the Maryland General Corporation Law on November 7, 1961, and, at the Effective Time (as defined in Article TENTH), will be merged into the Successor Corporation, and will cease to exist pursuant to the Maryland General Corporation Law.

The location of the principal office of the Merging Corporation in the State of Maryland is 6625 Dobbin Road, Columbia, Howard County, Maryland 21045. The Merging Corporation owns no interest in land in the State of Maryland.

THIRD: The Successor Corporation is a corporation incorporated in the State of Ohio under the Ohio General Corporation Law on June 7, 1977, and, at the Effective Time, will continue its corporate existence pursuant to the Ohio General Corporation Law. At the Effective Time, the name of the Successor Corporation shall be changed to dlhBowles, Inc.

The location of the principal office of the Successor Corporation in the State of Ohio is 2422 Leo Avenue, S.W., Canton, Ohio 44706. The resident agent of the Successor Corporation in the State of Ohio is John W. Saxon, 2422 Leo Avenue, S.W., Canton, Ohio 44706 and the resident agent of the Successor Corporation in the State of Maryland is Michael Ramsay, 6625 Dobbin Road, Columbia, Maryland 21045.

FOURTH: As a result of the Merger, the name of the Successor Corporation shall be

1

changed to "dlhBowles, Inc." and the articles of incorporation of the Successor Corporation will be amended to reflect such change of name. A copy of the amendment to be filed with the Ohio Secretary of State to effectuate the change of name is attached as Exhibit A hereto. As so amended, the articles of incorporation of the Successor Corporation in effect immediately prior to the Effective Time shall be the articles of incorporation of the Successor Corporation (the "Successor Corporation Charter") until further amended or supplemented as provided in the Successor Corporation Charter or by applicable law.

- FIFTH: (a) Immediately prior to the Effective Time, the total number of shares of capital stock which the Merging Corporation has authority to issue pursuant to its charter is 100, all of which is Common Stock, par value \$0.001 per share. The aggregate par value of all classes of capital stock of the Merging Corporation having a par value is \$0.10.
- (b) Immediately prior to the Effective Time, the total number of shares of capital stock which Acq Sub has authority to issue pursuant to its charter is 100, all of which is Common Stock, par value \$0.01 per share. The aggregate par value of all classes of capital stock of the Merging Corporation having a par value is \$1.00.
- (c) Immediately prior to the Effective Time, the total number of shares of capital stock which the Successor Corporation has authority to issue pursuant to its charter is 100,000, all of which is Common Stock, without par value.
- (d) Immediately after the Effective Time, the total number of shares of capital stock which the Successor Corporation will have authority to issue pursuant to its charter is 100,000, all of which is Common Stock, without par value.
- SIXTH: At the Effective Time, the Successor Corporation shall possess any and all powers of the Merging Corporation, and all leases, licenses, property, rights, privileges and powers of whatever nature and description of the Merging Corporation shall be transferred to, vested in and devolved upon the Successor Corporation without further act or deed and the Successor Corporation shall be liable for all of the debts, liabilities, duties and obligations of the Merging Corporation. Except as otherwise specifically provided in these Articles of Merger, consummation of the Merger at the Effective Time shall have the effects set forth in Section 3-114 of the Maryland General Corporation Law.

SEVENTH: The manner and basis of converting or exchanging issued stock of the merging corporations at the Effective Time, and the treatment of any issued stock of the merging corporations not to be exchanged or converted, as more fully described in the Merger Agreement, are as follows:

At the Effective Time:

(a) Each share of Common Stock of the Successor Corporation owned by any person immediately prior to the Effective Time will, by virtue of the Merger and without any further action on the part of any such person, the Successor Corporation or the Merging Corporation, be forfeited,

canceled and extinguished.

(b) Each of the issued and outstanding shares of Common Stock of the Merging Corporation and of Acq Sub will, by virtue of the Merger and without any further action on the part of the Successor Corporation, the Merging Corporation, Acq Sub or any stockholder of the Merging Corporation or Acq Sub, be canceled and upon surrender of any certificates for such shares, the holder of any such shares shall receive an equivalent number of shares of the Common Stock, without par value, of the Successor Corporation.

EIGHTH: The terms and conditions of the Merger herein set forth were advised, authorized, and approved by the Successor Corporation in the manner and by the vote required by its charter and the provisions of the Ohio General Corporation Law. On December 24, 2015, through a unanimous written action without a meeting of the members of the Board of Directors, the Board of Directors of the Successor Corporation adopted resolutions approving and declaring advisable the Merger, the Merger Agreement and the other transactions contemplated by the Merger Agreement on substantially the terms and conditions set forth in or referred to in such resolutions.

NINTH: The terms and conditions of the Merger herein set forth were duly advised, authorized, and approved by the Merging Corporation in the manner and by the vote required by the charter of said corporation and the provisions of the Maryland General Corporation Law, as follows:

- (a) On December 24, 2015, through a unanimous written action without a meeting of the members of the Board of Directors, the Board of Directors of the Merging Corporation adopted resolutions approving and declaring advisable the Merger, the Merger Agreement and the other transactions contemplated by the Merger Agreement on substantially the terms and conditions set forth in or referred to in such resolutions.
- (b) The Board of Directors of the Merging Corporation directed that the Merger, the Merger Agreement and the other transactions contemplated by the Merger Agreement be submitted for consideration by the sole stockholder of the Merging Corporation.
- (c) On December 24, 2015, through a written consent of the sole stockholder of the Merging Corporation adopted in accordance with the Maryland General Corporation Law, the Merger, the Merger Agreement and the other transactions contemplated by the Merger Agreement were duly adopted by the sole stockholder of the Merging Corporation.

TENTH: The Merger shall become effective as of January 8, 2016 (the "Effective Time").

ELEVENTH: Each of the undersigned acknowledges these Articles of Merger to be the act and deed of the respective corporation on behalf of which he or she has signed, and further, as to all matters or facts required to be verified under oath, each of the undersigned acknowledges that, to the best of his or her knowledge, information and belief, these matters and facts relating to the entity on whose behalf he or she has signed are true in all material respects and that this

statement is made under the penalties of perjury.

[Signatures on Following Page]

IN WITNESS WHEREOF, these Articles of Merger have been duly executed by the parties hereto on this 412 day of December, 2015.

BOWLES FLUIDICS CORPORATION, a

The second state of the se

Maryland corporation

By: Name: Peter Taft

Title: Vice President

Attest:

Name: Karen Tuleta Secretary

DLH INDUSTRIES, INC., an Ohio corporation

By: Peter Taft

Title: Vice President

Attest:

Name: Karen Tuleta

Secretary

[Articles of Merger (MD)]

PATENT

REEL: 047626 FRAME: 0232

201600801234

DATE: 01/08/2016 DOCUMENT ID 201600801234

DESCRIPTION
MERGER/DOMESTIC (MER)

FILING 99.00 EXPED 300.00

PENALTY

CERT .00 COPY

Receipt

This is not a bill. Please do not remit payment.

BAKER & HOSTETLER LLP SONIA K. LOWE, PARALEGAL 65 E. STATE STREET, SUITE 2100 COLUMBUS, OH 43215

STATE OF OHIO CERTIFICATE

Ohio Secretary of State, Jon Husted
499244

It is hereby certified that the Secretary of State of Ohio has custody of the business records for

DLHBOWLES, INC.

and, that said business records show the filing and recording of:

Document(s):

Document No(s):

MERGER/DOMESTIC

201600801234

Effective Date: 01/08/2016



United States of America State of Ohio Office of the Secretary of State Witness my hand and the seal of the Secretary of State at Columbus, Ohio this 8th day of January, A.D. 2016.

Ohio Secretary of State

Jon Husted

PATENT REEL: 047620 FRAME: 0233



Form 551 Prescribed by:

JON HUSTED OHIO SECRETARY OF STATE

Toll Free: (877) SOS-FILE (877-767-3453) Central Ohio: (614) 466-3910

www.OhioSecretaryofState.gov busserv@OhioSecretaryofStato.gov

File online or for more information; www.Ot/BusinessCentral.com

Mail this form to one of the following:

Regular Filing (non expedite) P.O. Box 1329 Columbus, OH 43218

Expedite Filing (Two business day processing time. Requires an additional \$100.00)

P.O. Box 1390 Columbus, DH 43218

Certificate of Merger

Filing Fee: \$99 (154-MER) Forms Must Be Typed

1	I. (A.	Surviving) Entity Name of Entity Surviving the Merger	DLH Industries, Inc.	
I	В.	Name Change: As a result of this merg	er, the name of the surviving entity has changed	to the following
		dlhBowles, Inc.		
((Complete only if name of surviving en The surviving entity is a (Please che	tity is changing through the merger) ck the appropriate box and fill in the appropria	ate blanks)
,	1.	☑ Domestic (Ohio entity)	Foreign (Non-Ohio Entity)	201C
			Jurisdiction of formation	3 5
	2.	Charter/Registration/License Numb	(If licensed in Ohio as domestic or foreign)	
	3.			THE PENSON
		Nonprofit Corporation		# *
		For-Profit Limited Liability Comp	any	
		Nonprofit Limited Liability Comp	any	
		Partnership		
		Limited Partnership		
		Limited Liability Partnership		
		Unincorporated Nonprofit Assoc	lation	

PATENT REEL: 037696 FRAME: 0238

Entity Name	Ohio Charter/License/ Registration Number	Jurisdiction of Formation	Type of Entity
DLH Acquisition Sub, Inc.		Delaware	For-profit
Bowles Fluidics Corporation		Maryland	For-profit
III. MERGER AGREEMENT ON FILE The name and mailing address of the merger agreement upon written reque Michael Ramsay	person or entity from whom/which e	eligible persons may	obtain a copy of th
The name and mailing address of the merger agreement upon written reque Michael Ramsay Name 6625 Dobbin Road	person or entity from whom/which e	eligible persons may	obtain a copy of the
The name and mailing address of the merger agreement upon written reque Michael Ramsay Name 6625 Dobbin Road Mailing Address	person or entity from whom/which e	eligible persons may	obtain a copy of the
The name and mailing address of the merger agreement upon written reque Michael Ramsay Name 6625 Dobbin Road	person or entity from whom/which e		

Page 2 of 6 Last Revised: 9/24/2015 Form 551

Upon filing this Certificate of Merger, or upon such herein shall merge into the listed surviving entity.	later date as specified herein, the merging entity/entities liste
VII. STATUTORY AGENT - To be filed ONLY if the filed only if the surviving entity is a foreign entity NOT license of a statutory agent upon whom any process, notice	ne surviving entity is a foreign entity not licensed in Ohio ed to transact business in Ohio, provide the name and addre e or demand may be served.
Name	
Mailing Address	
City	Ohio Zip Code
VIII. AMENDMENTS If a domestic corporation, limited liability company	or limited partnership survives the merger, any
If a domestic corporation, limited liability company	n, articles of organization, or certificate of limited partnership
If a domestic corporation, limited liability company of amendments to the entity's articles of incorporation of the surviving domestic entity shall be filed with the surviving entity is corporation lice and the surviving entity is not a domestic corporation. Ohio, the certificate of merger must be accompanied by division (H) of section 1701.86 division each domestic constituent corporation, and/or by the	n, articles of organization, or certificate of limited partnership ne certificate of merger. No Amendments GING OUT OF EXISTENCE ensed to transact business in Ohio is a constituent entity
If a domestic corporation, limited liability company of amendments to the entity's articles of incorporation of the surviving domestic entity shall be filed with the image of the surviving domestic entity shall be filed with the image of the surviving domestic entity shall be filed with the image of the surviving entity in a domestic corporation or foreign corporation lice and the surviving entity is not a domestic corporation in Ohio, the certificate of merger must be accomparequired by division (H) of section 1701.86 division each domestic constituent corporation, and/or by the division (C) or (D) of section 1703.17 of the Revise to transact business in Ohio.	a, articles of organization, or certificate of limited partnership the certificate of merger. No Amendments GING OUT OF EXISTENCE ensed to transact business in Ohio is a constituent entity on or foreign corporation to be licensed anied by the affidavits, receipts, certificates, or other evidence (G) of section 1702.47 of the Revised Code with respect to the affidavits, receipts, certificates, or other evidence required to Code with respect to each foreign constituent corporation

Form 551 Page 3 of 6 Last Revised: 9/24/2015

The undersigned constituent entities (constituent entities include all merging and surviving entities) have caused this certificate of merger to be signed by their duly authorized officers, partners and representatives.

	DLH Industries, Inc.	
	Name of entity	
	Peter (Peter	r G. Taft)
Ву:	Signature	
	Vice President	
lus:	Title	
	DLH Acquisition Sub, Inc.	
	Name of entity	
	(Pair	er G. Taft)
Ву:	y: Signature	is G. rany
its:	vice President	
	Tille	
	Bowles Fluidics Corporation	
	Name of entity	
		er G. Taft)
Ву:	y: Signature	
	Vice President	
lts:	s: Vice President	

An authorized representative of each constituent corporation, partnership, or entity must sign the merger certificate (ORC 1701.81(A), 1702.43 (A), 1705.38(A), 1776.70(A), 1782.433(A)). this includes all merging and surviving entities.

Page 4 of 6

Last Revised; 9/24/2015



Form 540 Prescribed by:

JON HUSTED OHIO SECRETARY OF STATE

Toll Free: (877) SOS-FILE (877-767-3453) Central Ohio: (614) 466-3910

www.OhioSecreteryofState.gov bussarv@OhioSecretaryofState.gov

File online or for more information: www.OHBusinessCentral.com

Mail this form to one of the following:

Regular Fäng (non expedits) P.O. Box 1329 Columbus, OH 43216

Expedite Fring (Two business day processing time.
Requires an additional \$100.00)
P.O. Box 1990

Columbus, OH 43218

Certificate of Amendment

(For-Profit, Domestic Corporation) Filing Fee: \$50 Form Must Be Typed

Check	appropriate box		
		existing Articles of Incorporation (125-AMDS)	
0/	Amended and Re	estated Articles (122-AMAP) - The following articles supersede the existing art	icles and all amendments thereto.
Compl	ete the following	information:	
Na	me of Corporation	DLH Industries, Inc.	
Ch	arter Number	499244	
Check	one box below a	and provide information as required:	
0	1701.70(A), inc	e hereby amended by the Incorporators. Pursuant to Ohio Revise corporators may adopt an amendment to the articles by a writing sign of named in the articles or elected and before subscriptions to share	ined by them if initial
0	(A), directors n	e hereby amended by the Directors. Pursuant to Ohio Revised Co hay adopt amendments if initial directors were named in articles or e o shares have not been received. Also, Ohio Revised Code section cases in which directors may adopt an amendment to the articles.	elected, but
	The resolution (In this space i	was adopted pursuant to Ohio Revised Code section 1701.70(B) nsert the number 1 through 10 to provide basis for adoption.)	1701.70(B)(6)
() The	e articles are her	reby amended by the Shareholders pursuant to Ohio Revised Code	e section 1701.71.
O The	articles are he	reby amended and restated pursuant to Ohio Revised Code section	1701.72.
Forn	n 540	Page 1 of 2	Last Revised: 4/17/2014

PATENT REEL: 037696 FRAME: 0272 A copy of the resolution of amendment is attached to this document. Note: If amended articles were adopted, they must set forth all provisions required in original articles except that articles amended by directors or shareholders need not contain any statement with respect to initial stated capital. See Ohio Revised Code section 1701.04 for required provisions. Required Must be signed by all incorporators, if amended by incorporators, or an authorized officer if amended by directors or shareholders, pursuant to Ohio Revised Code section 1701.73(B) and (C). If authorized representative is an individual, then they Signature must sign in the "signature" box and print their name in the "Print Name" box. N/A By (if applicable) If authorized representative is a business entity, not an Peter G. Taft, Vice President individual, then please print the business name in the Print Name "signalure" box, an authorized representative of the business entity must sign in the "By" box Signature and print their name in the "Print Name" box. By (if applicable) Print Name

Form 540

Page 2 of 2 Last Revised: 4/17/2014

CERTIFICATE OF AMENDMENT TO THE ARTICLES OF INCORPORATION OF DLH INDUSTRIES, INC.

Peter G. Taft, Vice President, and Karen L. Tuleta, Secretary, of DLH Industries, Inc. (the "Company"), an Ohio corporation for profit with its principal place of business at 2422 Leo Avenue, Canton, Ohio, do hereby certify that pursuant to a Unanimous Written Consent of the Board of Directors In Lieu of Meeting of the Board of Directors of the Company (the "Board") adopted in accordance with Section 1701.54 of the Ohio Revised Code on December 24, 2015, the following resolution was adopted pursuant to Section 1701.70(B)(6) of the Ohio Revised Code:

RESOLVED, that the Articles are hereby amended by changing Article FIRST thereof so that, as amended, Article FIRST shall be and read as follows:

"FIRST. The name of said corporation shall be dlhBowles, Inc."

IN WITNESS WHEREOF, we have executed and subscribed this Certificate and do affirm the foregoing as true under penalties of perjury this day of December, 2015.

Peter G. Taft, Vice Presiden

Attest:

Karen L. Tuleta, Secretary

648983,01-New York Server 5A

MSW - Draft February 26, 2008 - 5:12 PM

PATENT REEL: 0**3**7626 FRAME: 02**84**