504235594 02/20/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4282271 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NAM X. NGUYEN	03/31/2014
SCOTT D. SENFTEN	03/31/2014
MARY J. COLE	03/31/2014

RECEIVING PARTY DATA

Name:	LANDMARK GRAPHICS CORPORATION
Street Address:	2107 CITY WEST BLVD.
Internal Address:	BLDG. 2
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77042

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15122923

CORRESPONDENCE DATA

Fax Number: (713)223-3717

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: 7132261200

Email: hipdocket@lockelord.com

Correspondent Name: LOCKE LORD LLP

Address Line 1: 600 TRAVIS
Address Line 2: SUITE 2800

Address Line 4: HOUSTON, TEXAS 77002

ATTORNEY DOCKET NUMBER: 2013-IP-079713 (005US)

NAME OF SUBMITTER: ROBERT JACKSON

SIGNATURE: /Robert Jackson/

DATE SIGNED: 02/20/2017

Total Attachments: 4

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PATENT 504235594 REEL: 041302 FRAME: 0774

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PATENT REEL: 041302 FRAME: 0775

Ref. No.: 2013-IP-079713 Docket No.: 0539542-005WO

ASSIGNMENT OR RATIFICATION OF ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, the undersigned, hereafter individually/collectively "Assignor," has invented certain new and useful methods, devices, and/or systems that are disclosed and/or claimed in International Application entitled "MULTI-Z POLYLINE TO SINGLE-Z HORIZONS CONVERSION," a true and accurate copy of which is provided herewith, hereafter "Application;" and

WHEREAS LANDMARK GRAPHICS CORPORATION, a Delaware corporation having a place of business at 2107 City West Blvd. 2, Houston, TX 77042, United States of America, hereafter "Assignee," is desirous of acquiring the entire and exclusive right, title and interest in and to, and possession of, the subject matter disclosed and claimed in the Application, including any tangible materials, know-how and trade secrets related thereto (hereafter, collectively, the "Invention"); and the entire and exclusive right, title, interest in and to, and possession of, the Application, including rights to claim priority thereto, and to all related pending and future United States and/or foreign applications disclosing or claiming the Invention in whole or in part, including, without limitation, all provisional applications, non-provisional applications, divisional applications, continuation applications, continuation-in-part applications, renewals, reissues, reexaminations, substitutes or extensions thereof, and to all patents or other related property rights that may be issued or granted thereon anywhere in the world (hereafter, collectively, the "Intellectual Property").

NOW, THEREFORE, for and in consideration of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and to the extent not already assigned by Assignor to Assignee by prior written agreement or employment relationship, Assignor has hereby assigned, transferred and conveyed, or hereby ratified such, and does hereby assign, transfer and convey, or does hereby ratify such, to Assignee, its successors and assigns, the entire and exclusive right, title and interest in and to, and possession and use of, the aforesaid Intellectual Property, throughout the world, including without limitation, the right to file and prosecute applications for patent in the name of Assignee and/or Assignor; all income, royalties, damages and payments now or hereafter due or payable with respect to any patent or other right that is based on the Intellectual Property; and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned hereunder, as fully and entirely as the same would have been held and enjoyed by Assignor if this transfer and assignment had not been made;

AND Assignor hereby authorizes and requests the appropriate governmental officials to issue any and all such United States or foreign country patent or related property right assigned hereunder, to Assignee, as the owner of the entire and exclusive right, title and interest in and to the same;

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AND Assignor hereby represents, warrants and covenants that Assignor has the full right to convey the interest herein assigned, that Assignor has not executed and will not execute any agreement, instrument or assignment in conflict herewith, and that the rights assigned herein are not otherwise encumbered by any grant, license or right;

AND Assignor further covenants and agrees that Assignor will at any time upon request make, execute and deliver without further compensation, any and all other instruments in writing, including further applications, papers, affidavits, power of attorney, assignments, and other documents, and do all lawful acts and things, which, in the opinion of counsel for Assignee, its successors and assigns, may in any country be required or necessary more effectively to secure to and vest in Assignee, its successors and assigns the Intellectual Property, and that Assignor will sign any applications for reissue, division, continuation, continuation-in-part, counterpart, renewal, reexamination, substitute or extension of said Application or any resulting patent or related property right;

AND Assignor further covenants and agrees that Assignor will at any time upon request communicate to the Assignee, its successors, assigns or other legal representatives any facts relating to the aforesaid Invention, Application and Intellectual Property known to it, and will testify as to the same in any interference, litigation, mediation, arbitration or other proceeding when requested to do so.

IN WITNESS WHEREOF, Assignor has hereunto set his/her hand and seal.

STATE OF TEXAS COUNTY OF HARRIS

Nam X. NGUYEN 21414 Grand Hollow Lane Katy, TX 77450 USA

personally appeared Nam X. NGUYEN, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

BEFORE ME, the undersigned authority, on this day

GIVEN UNDER MY HAND and seal of office this 5 | day of MMPCH, 2014.

JONULY MALIC SVI PUL

Date of Execution

03/31/2014

ASHLEY MARIE SKRIPOL Notary Public. State of Texas My Commission Expires September 25, 2017

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V Signature

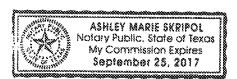
Scott **D. S**ENFTEN 4734 Melissa Court Sugar Land, TX 77479 USA

31 March 2014 Date of Execution COUNTY OF

BEFORE ME, the undersigned authority, on this day personally appeared Scott D. SENFTEN, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this day of 100 me chi, 2014

Ashugharie Octipal



Ref. No. 2013-IP-079713 Docket No.: 0539542-005WO

Cus	1 Colu	
l	Signature	

Mary J. COLE 210 Renoir Drive Houston, TX 77079 USA

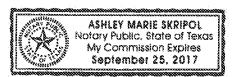
3	31	2014	
		Date of	Execution

STATE OF	TEXAS	8
COUNTY OF	HARRIS	25

BEFORE ME, the undersigned authority, on this day personally appeared Mary J. COLE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this 31 day of 1997 (H 20 14)

Astrymanie Scripce



RECORDED: 02/20/2017