## 505887008 01/28/2020 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5933833

		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY DA	ATA		
		Name	Execution Date
SRINATH MADASU			09/08/2017
KESHAVA PRASAD RAN	IGARAJA	N	05/24/2018
ROBELLO SAMUEL			01/18/2018
NISHANT RAIZADA			01/31/2018
RECEIVING PARTY DA	ГА		
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Street Address:	3000 N. SAM HOUSTON PARKWAY E.		
City:	HOUSTON		
State/Country:	TEXAS		
Postal Code:	77032-3219		
PROPERTY NUMBERS Property Type	Total: 1	Number	
Application Number:	1	6631542	_
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Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 2: Address Line 4: ATTORNEY DOCKET NUNAME OF SUBMITTER: SIGNATURE: DATE SIGNED:	ATA e sent to t provided; (4 jld K 1 <sup>-1</sup> S A <b>MBER:</b>	404)815-6565 the e-mail address first; if that is u if that is unsuccessful, it will be se 404) 815-6500 opez@kilpatricktownsend.com ILPATRICK TOWNSEND & STOCK 100 PEACHTREE STREET UITE 2800 TLANTA, GEORGIA 30309 061429-1163141 JOSE R. LOPEZ, JR. PARALEO /JOSE R. LOPEZ, JR./	ent via US Mail. TON LLP

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## ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS IN PATENT APPLICATION

Whereas we, the undersigned inventors, have invented certain new and useful innovations as set forth in the patent application entitled:

## ITERATIVE REAL-TIME STEERING OF A DRILL BIT

the specification of which was filed with the U.S. Receiving Office of the PCT on August 21, 2017, and assigned application no. PCT/US2017/047748.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we acknowledge, we:

- 1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Landmark Graphics Corporation, a corporation of the State of Texas having a principal place of business at 3000 N. Sam Houston Parkway E., Houston, Texas 77032-3219 ("Assignee"), the entire right, title, and interest in and to:
  - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
  - (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
  - (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
  - (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph

PATENT REEL: 051647 FRAME: 0003 Assignment of Intellectual Property Rights in Application Patent Application Entitled: Iterative Real-Time Steering of a Drill Bit Attorney Docket: 061429-1052937 Page 2 of 5

(including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

- Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
- 3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
- 4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us, as well as our heirs, legal representatives, and assigns.
- 5. Promise and affirm that we have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.

Dated: 09/08/17	la			
	Srinath Madasu			
STATE OF TO KAS				
COUNTY OF HAPPIS				
Before me, a Notary Public in and for the State of $\underline{1000000}$ , on this $\underline{50000000}$ , on this $\underline{5000000000}$ , 2017, personally appeared Srinath Madasu, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.				
(Seal)	Octricia MR cales			
	My Commission Expires:			
ORTENCIA M. ROSALES Notory Public, State of Texas My Commission Expires November 05, 2017				
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PATENT REEL: 051647 FRAME: 0004 Assignment of Intellectual Property Rights in Application Patent Application Entitled: Iterative Real-Time Steering of a Drill Bit Attorney Docket: 061429-1052937 Page 3 of 5

Dated:

1. A

Keshava Prasad Rangarajan

STATE OF Texas COUNTY OF Harris

Before me, a Notary Public in and for the State of  $\underline{\text{Te} \times \alpha S}$ , on this  $\underline{24}$  day of  $\underline{2018}$ , personally appeared Keshava Prasad Rangarajan, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.

onel hna NOTARY PUBLIC

My Commission Expires:



(Seal)

Assignment of Intellectual Property Rights in Application Patent Application Entitled: Iterative Real-Time Steering of a Drill Bit Attorney Docket: 061429-1052937 Page 4 of 5

8 Dated: STATE OF <u>*Texas</u>*</u> COUNTY OF <u>Harris</u>

GALE L. MUSKIET Notary ID #13078280-2 My Commission Expires August 17, 2020

Robéli

Before me, a Notary Public in and for the State of  $7e_{\chi q,5}$ , on this 18 day of  $4a_{\chi \lambda \mu \alpha l-\eta}$ , 2018, personally appeared **Robello Samuel**, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.

ma **NOTARY PUBLIČ** 

My Commission Expires:

Assignment of Intellectual Property Rights in Application Patent Application Entitled: Iterative Real-Time Steering of a Drill Bit Attorney Docket: 061429-1052937 Page 5 of 5

Dated: 01312018

Nishant Raizada

STATE OF Texas COUNTY OF Harris

Before me, a Notary Public in and for the State of  $\underline{\text{Texas}}$ , on this  $\underline{31}$  day of  $\underline{\text{January}}$ , 2018, personally appeared Nishant Raizada, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.

Coul na NOTARY PUBLIC

My Commission Expires:



(Seal)