505404082 04/01/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5450876

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date | | |
|-------------------------------|----------------|--|--|
| GYANVEER SINGH | 11/20/2018 | | |
| SUSANTO SEN | 11/20/2018 | | |
| SHAKIR SHARFRAZ ASHFAQ AHAMED | 11/20/2018 | | |
| SRIRAM PONNUSWAMY | 01/02/2019 | | |

RECEIVING PARTY DATA

| Name: | ROVI GUIDES, INC. | |
|--------------------|---------------------------|--|
| Street Address: | s: 2160 GOLD STREET | |
| City: | SAN JOSE | |
| State/Country: | State/Country: CALIFORNIA | |
| Postal Code: 95002 | | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | | | | |
|---------------------|----------|--|--|--|--|
| Application Number: | 16143728 | | | | |

CORRESPONDENCE DATA

Fax Number:

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.

Email: maria.marley@hglaw.com
Correspondent Name: HALEY GUILIANO LLP

Address Line 1:75 BROAD STREET, SUITE 1000Address Line 4:NEW YORK, NEW YORK 10004

| ATTORNEY DOCKET NUMBER: | 003597-1938-101 |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | MARIA MARLEY |
| SIGNATURE: | /MARIA MARLEY/ |
| DATE SIGNED: | 04/01/2019 |

Total Attachments: 6

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PATENT 505404082 REEL: 048754 FRAME: 0462

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A-SSIGNMENT

Whereas we,

- (1) Gyanveer Singh;
- (2) Susanto Sen;
- (3) Shakir Sharfraz Ashfaq Ahamed; and
- (4) Sriram Ponnuswamy;

residing, respectively at:

- (1) Village: Kurwa, PO: Jahangirpur Sham Vaishali, Bihar 844504, India;
- (2) 900, 6th Cross Gokul 1st Stage 1st Phase P.O. Mathikere Bangalore, Karnataka 560054 India;
- (3) B-114, Trifecta Joli apartments, Hadosiddapura, near Kodathi village, off Sarjapur Road, Bangalore, Karnataka 560037 India; and
- (4) No. 9, Ragavendra Salai Chitlapakkam Chennai, Tamil Nadu 600064 India;

have made an invention in:

SYSTEMS AND METHODS FOR MEDIA PROJECTION SURFACE SELECTION

filed **September 27**, **2018** and assigned U.S. Patent Application Serial No. **16/143,728**; and

WHEREAS, ROVI GUIDES, INC., a corporation organized and existing under the laws of the State of Delaware and having an office and place of business at 2160 Gold Street, San Jose, CA 95002, is desirous of acquiring the entire interest in said invention, said United States patent application and in any Letters Patent which may issue thereon;

NOW, THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) to each of us paid, and other good

and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of us hereby sells, assigns and transfers unto the said ROVI GUIDES, INC., its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in and to said United States patent application, including any continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any patents which may issue thereon, and any reissues of the same, and including the right to claim priority under the International Convention based on said patent application; and all right, title and interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same; and each of us hereby authorizes and requests competent authorities to grant and issue any and all patents on said invention to the said ROVI GUIDES, INC. as the assignee of the entire interest therein; and each of us further agrees to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

As the inventor, we each declare as follows:

The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I hereby acknowledge that any willful false statement made in the declaration set forth in this paragraph is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

IN TESTIMONY WHEREOF, we have hereunto signed our names on the date indicated hereinafter.

20-November-2018

Date

Gyanveer Singh

Suranto Sen

Susanto Sen

20-November-2018

A Lili elly Z.

Date

Shakir Sharfraz Ashfaq Ahamed

Sriram Ponnusamy

Date

ASSIGNMENT

Whereas we,

- (1) Gyanveer Singh;
- (2) Susanto Sen;
- (3) Shakir Sharfraz Ashfaq Ahamed; and
- (4) Sriram Ponnuswamy;

residing, respectively at:

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- (2) 900, 6th Cross Gokul 1st Stage 1st Phase P.O. Mathikere Bangalore, Karnataka 560054 India;
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and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of us hereby sells, assigns and transfers unto the said ROVI GUIDES, INC., its successors, assigns and legal representatives, all right, title and interest in and to said invention and any improvements thereon for all countries of the world, and in and to said United States patent application, including any continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any patents which may issue thereon, and any reissues of the same, and including the right to claim priority under the International Convention based on said patent application; and all right, title and interest in and to every patent application filed or to be filed on said invention in any other country, including renewals, revivals, continuations, continuations in part, and divisions thereof, and any substitute applications therefor, and any and all patents which may issue thereon, and any reissues and extensions of the same; and each of us hereby authorizes and requests competent authorities to grant and issue any and all patents on said invention to the said ROVI GUIDES, INC. as the assignee of the entire interest therein; and each of us further agrees to execute upon request of the assignee such additional documents, if any, as are necessary and proper to secure patent protection on said invention throughout all countries of the world, and to otherwise give full effect to and perfect the rights of the assignee under this Assignment.

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| | | IN | TESTIMONY | WHEREOF, | $\mathbb{W}\ominus$ | have | hereunto | signed | our | names |
|----|-----|------|-----------|------------|---------------------|------|----------|--------|-----|-------|
| on | the | date | indicated | hereinafte | er. | | | | | |

| Date | Gyanveer Singh |
|---------------|-------------------------------|
| Date | Susanto Sen |
| Date | Shakir Sharfraz Ashfaq Ahamed |
| April 01,2019 | Sriram Ponnuswamy |

PATENT REEL: 048754 FRAME: 0469

RECORDED: 04/01/2019