504648898 11/17/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4695619

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------------|----------------|
| AVATAR MERGER SUB II, LLC | 11/15/2017 |

RECEIVING PARTY DATA

| Name: | SNAP INC. | |
|-----------------|------------------|--|
| Street Address: | 63 MARKET STREET | |
| City: | VENICE | |
| State/Country: | CALIFORNIA | |
| Postal Code: | 90291 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 15430133 | |

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.

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Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER, P.A.

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Address Line 4: MINNEAPOLIS, MINNESOTA 55402-0938

| ATTORNEY DOCKET NUMBER: | 4218.058US2 |
|-------------------------|---------------------|
| NAME OF SUBMITTER: | MICHELLE RED BEAR |
| SIGNATURE: | /Michelle Red Bear/ |
| DATE SIGNED: | 11/17/2017 |

Total Attachments: 5

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PATENT 504648898 REEL: 044164 FRAME: 0377

RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 4218.058US2 Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Snap Inc. Avatar Merger Sub II, LLC Street Address: 63 Market Street Additional name(s) of conveying party(ies) attached? City: Venice State: CA Zip: 90291 []Yes [X]No Country: United States of America 3. Nature of conveyance: Additional name(s) & address(es) attached? []Yes [X]No [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: November 15, 2017 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Serial No. 15/430,133, Filed February 10, 2017 Additional numbers attached? []Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41):\$ 0.00 Name: Timothy J. Singleton [Authorized to be charged to deposit account 19-Address: 0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Please charge any additional fees or credit any over Minneapolis, Minnesota 55402--0938 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Timothy J. Singleton/Reg. No. 69,759 Name of Person Signing Total number of pages including cover sheet: 5

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450

Alexandria, VA 22313-1450

ASSIGNMENT

WHEREAS, Avatar Merger Sub II, LLC an entity organized and existing under and by virtue

of the laws of Delaware, United States of America, and having an office and place of business at

c/o 1600 TCF Tower, 121 south Eighth Street, Minneapolis, MN 55402, United States of America

(hereinafter "Assignor"), is the owner of assets identified in Appendix A (hereinafter collectively

"Patent Properties"), including all inventions and other subject matter described in the Patent

Properties;

AND WHEREAS, Snap Inc., an entity organized and existing under and by virtue of the laws

of Delaware, United States of America, and having an office and place of business at 63 Market

Street, Venice, CA 90291, United States of America (hereinafter "Assignee"), is desirous of

acquiring the entire right, title and interest in and to said Patent Properties, including all

inventions and other subject matter described therein, and any patent to be obtained in relation

therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable

consideration, the receipt and sufficiency whereof is hereby acknowledged, the Assignor hereby:

ASSIGNS, CONVEYS AND TRANSFERS to the Assignee the Assignor's entire right, title, and

interest for the United States and all foreign countries and jurisdictions in and to:

said Patent Properties, including all original and reissued patents which have been or shall

be issued in the United States and all foreign countries and jurisdictions based in whole or in part on

any of said Patent Properties;

all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all

other applications for a patent or patents which have been or shall be filed in the United States

(including all provisional and non-provisional applications), and in all foreign countries and

jurisdictions, based in whole or in part on any of said Patent Properties (including any application

for a utility model or an innovation patent application);

the right to claim priority to said Patent Properties in relation to subject matter based in

whole or in part on said Patent Properties and any of the foregoing including the right to file foreign

applications under the provisions of any convention or treaty;

PATENT **REEL: 044164 FRAME: 0379**

and the right to all causes of action, remedies, and other enforcement rights related to said Patent Properties, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to said Patent Properties and any of the foregoing, including the right to obtain and collect damages and/or royalties due for past, present, or future infringement;

AUTHORIZES AND REQUESTS the issuing authority to issue any and all United States and foreign patents granted on said Patent Properties to the Assignee;

AUTHORIZES AND REQUESTS that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 144407 may (directly or through his/her designee) delete, insert, or alter any information related to said Patent Properties or any of the foregoing, after execution of this Assignment;

WARRANTS AND COVENANTS that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Assignor, and that the full right to convey the same as herein expressed is possessed by the Assignor;

COVENANTS, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Assignor shall (1) secure cooperation from all present and former employees and/or inventors contributing or having contributed to the Patent Properties; (2) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other patent applications for the Patent Properties; (3) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the Patent Properties; (4) communicate to the Assignee all facts known to the Assignor relating to the Patent Properties and the history thereof; (5) cooperate with the Assignee in any interference, reexamination, review proceeding, reissue, opposition, dispute, or litigation involving any of the applications or patents for the Patent Properties; and (6) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to said Patent Properties in the Assignee, or for securing, maintaining and enforcing proper patent protection for the Patent Properties; and

PATENT REEL: 044164 FRAME: 0380 COVENANTS, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions. To the extent that any such provision is found to be unenforceable, the Assignor, when requested and without compensation shall act in good faith to substitute for such provision a new provision with content and purpose as close as possible to the provision deemed unenforceable.

THIS AGREEMENT IS TO BE BINDING on the assigns, representatives, and successors of the Assignor, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED to by Assignor as of the Date of the Signature Below:

Assignor: Avatar Merger Sub II, LLC

Signature: / Vidor Shaburov

Signature: Printed Name: Victor Shaburov

Title: President

Date: 11/15/2017

ACCEPTED by Assignee as of the Date of the Signature Below:

Assignee: Snap Inc.

Signature: / Wee Yeh

Title: Director of IP

Date: 11/14/2017

PATENT REEL: 044164 FRAME: 0381

Appendix A

| Patent/ | Application | Title | Filing date | Issue/Grant |
|-----------------|-------------|--|-------------|-------------|
| Publication No. | Number | | | Date |
| 9,232,189 | 14/661,367 | BACKGROUND MODIFICATION IN VIDEO CONFERENCING | 2015-03-18 | 2016-01-05 |
| 2017/0019633 | 14/987,514 | BACKGROUND MODIFICATION IN VIDEO CONFERENCING | 2016-01-04 | |
| 9,576,190 | 14/661,539 | EMOTION RECOGNITION IN VIDEO CONFERENCING | 2015-03-18 | 2017-02-21 |
| 2017/0154211 | 15/430,133 | EMOTION RECOGNITION IN VIDEO CONFERENCING | 2017-02-10 | |
| 9,747,573 | 14/665,686 | EMOTION RECOGNITION FOR WORKFORCE ANALYTICS | 2015-03-23 | 2017-08-29 |
| | 15/688,480 | EMOTION RECOGNITION FOR WORKFORCE ANALYTICS | 2017-08-28 | |
| 2015/0221118 | 14/314,312 | METHOD FOR REAL TIME VIDEO PROCESSING FOR CHANGING PROPORTIONS OF AN OBJECT IN THE VIDEO | 2014-06-25 | |
| 9,396,525 | 14/325,477 | METHOD FOR REAL TIME VIDEO PROCESSING INVOLVING CHANGING A COLOR OF AN OBJECT ON A HUMAN FACE IN A VIDEO | 2014-07-08 | 2016-07-19 |
| 2016/0322079 | 15/208,973 | METHOD FOR REAL TIME VIDEO PROCESSING INVOLVING CHANGING A COLOR OF AN OBJECT ON A HUMAN FACE IN A VIDEO | 2016-07-13 | |
| 2015/0222821 | 14/314,324 | METHOD FOR REAL-TIME VIDEO PROCESSING INVOLVING CHANGING FEATURES OF AN OBJECT IN THE VIDEO | 2014-06-25 | |
| 2015/0221136 | 14/314,334 | METHOD FOR REAL-TIME VIDEO PROCESSING INVOLVING RETOUCHING OF AN OBJECT IN THE VIDEO | 2014-06-25 | |
| 2015/0221338 | 14/314,343 | METHOD FOR TRIGGERING EVENTS IN A VIDEO | 2014-06-25 | |

PATENT REEL: 044164 FRAME: 0382

RECORDED: 11/17/2017