506823182 08/18/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6870002

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHANG XIAO	04/02/2020
KARL BAYER	04/06/2020
SHREE K. NAYAR	04/04/2020
CHANGXI ZHENG	04/21/2021

RECEIVING PARTY DATA

Name:	SNAP INC.
Street Address:	3000 31ST STREET
City:	SANTA MONICA
State/Country:	CALIFORNIA
Postal Code:	90405

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16832630

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.

Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER / SNAP, IN

Address Line 1: P.O. BOX 2938

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	4218.734US1	
NAME OF SUBMITTER:	MICHELLE RED BEAR	
SIGNATURE:	/Michelle Red Bear/	
DATE SIGNED:	08/18/2021	

Total Attachments: 7

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RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 4218.734US1

Mail Stop Assignment Recordation Services

P.O. Box 1450

Alexandria, VA 22313-1450

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. Chang Xiao, Karl Bayer, Shree K. Nayar, Changxi Street Address: 3000 31st Street Zheng City: <u>Santa Monica</u> State: <u>CA</u> Country: <u>United States of America</u> Additional name(s) of conveying party(ies) attached? Zip: 90405 []Yes [X]No Additional name(s) & address(es) attached? []Yes 3. Nature of conveyance: [X]No [X] Assignment [] Merger [] Security Agreement[] Change of Name [] Other Execution Date: April 2, 2020, April 6, 2020, April 4. 2020, April 21, <u>20</u>21 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. 16/832,630 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: Trevor E. Lind [[Enclosed []Authorized to be charged to deposit account Address: 19-0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Please charge any additional fees or credit any over Minneapolis, Minnesota 55402 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. /Trevor E. Lind/ August 18, 2021 Trevor E. Lind/Reg. No. 54,785 Name of Person Signing Signature Date Total number of pages including cover sheet: 7 Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks

> PATENT REEL: 057210 FRAME: 0278

Patent and Trademark Office

ASSIGNMENT

WHEREAS, Chang Xiao, Karl Bayer, Shree K. Nayar and Changxi Zheng (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention"); as described in the patent application filed on March 27, 2020, assigned US application serial number 16/832,630, and titled VIBRATIONAL INPUT ELEMENTS and as described in a provisional patent application filed on March 29, 2019 assigned United States application serial number 62/826,581, and titled VIBRATIONAL INPUT ELEMENTS.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to Snap Inc. (the "Assignee"), a corporation of the State of Delaware, having a place of business at 2772 Donald Douglas Loop North, Santa Monica, CA 90405, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the Invention which is disclosed in the above-identified application or applications;

such application or applications, and 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 such Invention (including any application for a utility model or an innovation patent application);

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 such Invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such Invention to the Assignee;

AUTHORIZE AND REQUEST 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

Assignment

Assignors: Chang Xiao et al.

Title: VIBRATIONAL INPUT ELEMENTS

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Docket No: 4218,734US1

Client Ref. No. P01043-US1

information related to the above-identified patent application or applications or any of the foregoing, after

execution of this Assignment;

WARRANT AND COVENANT 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 Undersigned,

and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, 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 Undersigned shall (1) execute

all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal,

reissue, and all other patent applications for the Invention; (2) execute all rightful oaths, declarations,

assignments, powers of attorney and other papers for the Invention; (3) communicate to the Assignee all

facts known to the Undersigned relating to the Invention and the history thereof; (4) cooperate with the

Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the

applications or patents for the Invention; and (5) take such further actions as the Assignee shall reasonably

consider necessary or desirable for vesting title to such Invention in the Assignee, or for securing, maintaining

and enforcing proper patent protection for the Invention;

COVENANT, 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.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the

Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

Assignment Docket No: 4218.734US1
Assignors: Chang Xiao et al. Client Ref. No. P01043-US1
Title: VIBRATIONAL INPUT ELEMENTS

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Assignor:

(Signature): / Chang Xiao

Name: Chang Xiao

City/State or Country: New York, NY

Date: Apr 2, 2020

Docket No: 4218.734US1 Assignment Assignors: Chang Xiao et al.
Title: VIBRATIONAL INPUT ELEMENTS Client Ref. No. P01043-US1

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Assignor:

Karl Bayer (Signature):

Name: Karl Bayer

City/State or Country: New York, NY

Date: Apr 6, 2020

Assignment Docket No: 4218.734US1
Assignors: Chang Xiao et al. Client Ref. No. P01043-US1
Title: VIBRATIONAL INPUT ELEMENTS

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Assignor:

(Signature): / Shree Nayar

Name: Shree K. Nayar

City/State or Country: New York, New York

Date: Apr 4, 2020

Docket No: 4218.734US1 Assignment Assignors: Chang Xiao et al.
Title: VIBRATIONAL INPUT ELEMENTS Client Ref. No. P01043-US1

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Assignor:

(Signature):

Name: Changxi Zheng

City/State or Country: New York, NY

Date: Apr 21, 2021

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RECORDED: 08/18/2021