

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT6149267

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                      |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                          |
| <b>CONVEYING PARTY DATA</b>   |                                     |
| <b>Name</b>   | <b>Execution Date</b>               |
| BOWEI CHEN  | 04/22/2020                          |
| THIERRY CRUANES   | 04/23/2020                          |
| FLORIAN ANDREAS FUNKE   | 04/21/2020                          |
| ALLISON WAINGOLD LEE  | 04/22/2020                          |
| JIAQI YAN   | 04/21/2020                          |
| <b>RECEIVING PARTY DATA</b>   |                                     |
| <b>Name:</b>  | SNOWFLAKE INC.                      |
| <b>Street Address:</b>  | 450 CONCAR DR                       |
| <b>City:</b>  | SAN MATEO                           |
| <b>State/Country:</b>   | CALIFORNIA                          |
| <b>Postal Code:</b>   | 94402                               |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                     |
| <b>Property Type</b>  | <b>Number</b>                       |
| Application Number:   | 16857790                            |
| <b>CORRESPONDENCE DATA</b>  |                                     |
| <b>Fax Number:</b>  |                                     |
| <i>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.</i> |                                     |
| <b>Email:</b>   | request@slwip.com                   |
| <b>Correspondent Name:</b>  | SCHWEGMAN LUNDBERG & WOESSNER, P.A. |
| <b>Address Line 1:</b>  | P.O. BOX 2938                       |
| <b>Address Line 4:</b>  | MINNEAPOLIS, MINNESOTA 55402        |
| <b>ATTORNEY DOCKET NUMBER:</b>  | 5397.033US1                         |
| <b>NAME OF SUBMITTER:</b>   | ERIKA WATKINS                       |
| <b>SIGNATURE:</b>   | / Erika Watkins /                   |
| <b>DATE SIGNED:</b>   | 06/11/2020                          |
| <b>Total Attachments: 8</b>   |                                     |
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RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: 5397.033US1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Bowei Chen, Thierry Cruanes, Florian Andreas Funke,  
Allison Waingold Lee, Jiaqi Yan

Additional name(s) of conveying party(ies) attached?

Yes  No

3. Nature of conveyance:

Assignment  Merger  
 Security Agreement  Change of Name  
 Other

Execution Date: April 22, 2020, April 23, 2020, April 21, 2020, April 22, 2020, April 21, 2020

2. Name and address of receiving party(ies):

Name: Snowflake Inc.

Street Address: 450 Concar Dr

City: San Mateo State: CA Zip: 94402  
Country: United States of America

Additional name(s) & address(es) attached?  Yes  No

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)

Serial No. 16/857,790

B. Patent No.(s)

Additional numbers attached?  Yes  No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Triet M. Nguyen

Address:

Schwegman Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, Minnesota 55402

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 0.00

Enclosed

Authorized to be charged to deposit account  
19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743

**DO NOT USE THIS SPACE**

9. 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.

Triet M. Nguyen/Reg. No. 64,790

Name of Person Signing

/Triet M. Nguyen/

Signature

June 10, 2020

Date

Total number of pages including cover sheet: 8

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

**PATENT**  
**REEL: 052909 FRAME: 0789**

### ASSIGNMENT

WHEREAS, Bowei Chen, Thierry Cruanes, Florian Andreas Funke, Allison Waingold Lee and Jiaqi Yan (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 April 24, 2020, assigned US application serial number 16857790, and titled PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN and as described in a provisional patent application filed on September 25, 2019 assigned United States application serial number 62/905,920, and titled Adaptive Aggregation In A Database Environment.

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 Snowflake Inc. (the "Assignee"), a corporation of the State of Delaware, having a place of business at 450 Concar Dr, San Mateo, CA 94402, 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. 164795 may (directly or through his/her designee) delete, insert, or alter any

**Assignment**

Assignors: Bowei Chen et al.

Title: PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN

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Docket No: 5397.033US1

Client Ref. No. SNO-0050US1

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**

Assignors: Bowei Chen et al.

Docket No: 5397.033US1

Client Ref. No. SNO-0050US1

Title: PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN

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**Assignor:**

(Signature):

DocuSigned by:  


105165391D6847E...

Name: Bowei Chen

City/State or Country: San Bruno, CA

Date:

April 22, 2020 | 11:11 AM PDT

**Assignment**

Assignors: Bowei Chen et al.

Docket No: 5397.033US1

Client Ref. No. SNO-0050US1

Title: PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN

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**Assignor:**

(Signature):

DocuSigned by:  
*Thierry Cruanes*

1222CA2E69FE42F...  
Name: Thierry Cruanes

City/State or Country: San Mateo, California

Date:

April 23, 2020 | 8:56 PM PDT

**Assignment**

Assignors: Bowei Chen et al.

Docket No: 5397.033US1

Client Ref. No. SNO-0050US1

Title: PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN

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**Assignor:**

(Signature):

DocuSigned by:  


50BEC15181BA4F8...  
Name: Florian Andreas Funke

City/State or Country: San Mateo, California

Date:

April 21, 2020 | 7:24 PM PDT



**Assignment**

Assignors: Bowei Chen et al.

Docket No: 5397.033US1

Client Ref. No. SNO-0050US1

Title: PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN

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**Assignor:**

(Signature):

DocuSigned by:  


Name: Allison Waingold Lee

City/State or Country: San Carlos, California

Date:

April 22, 2020 | 10:05 AM PDT

**Assignment**

Assignors: Bowei Chen et al.

Docket No: 5397.033US1

Client Ref. No. SNO-0050US1

Title: PLACEMENT OF ADAPTIVE AGGREGATION OPERATORS AND PROPERTIES IN A QUERY PLAN

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**Assignor:**

(Signature):

DocuSigned by:  
  
3F70DA50CD65443...

Name: Jiayi Yan

City/State or Country: San Mateo, California

Date:

April 21, 2020 | 6:06 PM PDT