PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6848558

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------------|----------------|
| ANDREW D. KING | 09/14/2016 |
| ROBERT B. ISRAEL | 08/31/2016 |
| PAUL I. BUNYK | 08/31/2016 |
| TOMAS J. BOOTHBY | 09/01/2016 |
| AIDAN P. ROY | 09/01/2016 |
| JAMES A. KING | 06/07/2020 |
| TREVOR M. LANTING | 06/08/2020 |
| ABRAHAM J. EVERT | 06/23/2020 |
| STEVEN P. REINHARDT | 09/07/2016 |
| D-WAVE (GOVERNMENT) INC. | 11/11/2016 |

RECEIVING PARTY DATA

| Name: | D-WAVE SYSTEMS, INC. |
|-----------------|----------------------|
| Street Address: | 3033 BETA AVENUE |
| City: | BURNABY |
| State/Country: | CANADA |
| Postal Code: | V5G 4M9 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16988232 |

CORRESPONDENCE DATA

Fax Number: (206)621-8783

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.

2063401000 Phone:

Email: gdunn@cozen.com FRANK ABRAMONTE Correspondent Name: Address Line 1: 999 THIRD AVENUE

Address Line 2: **SUITE 1900**

Address Line 4: SEATTLE, WASHINGTON 98104

ATTORNEY DOCKET NUMBER: 240105.573D1/492556

REEL: 057086 FRAME: 0238 506801739

PAIENI

| NAME OF SUBMITTER: | FRANK ABRAMONTE |
|--|-------------------|
| SIGNATURE: | /Frank Abramonte/ |
| DATE SIGNED: | 08/04/2021 |
| Total Attachments: 14 | |
| source=573D1_Assignment from parent | 1#page1.tif |
| source=573D1_Assignment from parent | 1#page2.tif |
| source=573D1_Assignment from parent | 1#page3.tif |
| source=573D1_Assignment from parent1#page4.tif | |
| source=573D1_Assignment from parent1#page5.tif | |
| source=573D1_Assignment from parent2#page1.tif | |
| source=573D1_Assignment from parent2#page2.tif | |
| source=573D1_Assignment from parent2#page3.tif | |
| source=573D1_Assignment from parent2#page4.tif | |
| source=573D1_Assignment from parent2#page5.tif | |
| source=573D1_Assignment from parent3#page1.tif | |
| source=573D1_Assignment from parent3#page2.tif | |
| source=573D1_Assignment from parent | 4#page1.tif |

source=573D1_Assignment from parent4#page2.tif

PATENT REEL: 057086 FRAME: 0239

WHEREAS, we, Andrew D. King, Robert B. Israel, Paul I. Bunyk, Tomas J. Boothby and Aidan P. Roy (hereinafter referred to as ASSIGNORS), all having a mailing address of 3033 Beta Avenue, Burnaby, British Columbia, Canada V5G 4M9, are listed inventors/applicants, along with Steven P. Reinhardt, of the provisional patent application entitled "SYSTEMS AND METHODS FOR EMBEDDING PROBLEMS INTO AN ANALOG PROCESSOR," as filed with the U.S. Patent and Trademark Office on April 18, 2016, and assigned Application No. 62/324,206;

WHEREAS, D-Wave Systems Inc. (hereinafter referred to as ASSIGNEE), a Canadian corporation having a place of business at 3033 Beta Avenue, Burnaby, British Columbia, Canada V5G 4M9, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said provisional patent application and the invention(s) disclosed therein, and any and all letters patent(s) which claim priority to said provisional application and any and all letters patent(s) which claim the invention(s) disclosed therein and which may be granted in the United States of America and its territorial possessions including any extensions or adjustments in term thereof and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States provisional application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, and including the right to sue and collect damages for past and present infringement of said letters patent(s); said invention, provisional application and all letters patent(s) on said invention or claiming priority to said provisional application to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said

> PATENT REEL: 05**348**6 FRAME: 0**280**

| invention, for litigation regarding said letters patent, or for the purpose of protecting title to said |
|---|
| invention or letters patent therefor. |
| Date City of Burnaly Province of BC Andrew D. King Ss. |
| I certify that I know or have satisfactory evidence that Andrew Douglas King signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument. |
| Date September 14, 2016 (Type or Print) Kimberly Domino (Type or Print Name of Witness) Signed at Burnaby BC (Signature of Witness) |
| 2493/2016 <u>地元</u> 32016 Date Robert B. Israel |
| City of Burnaby Province of BC ss. |
| I certify that I know or have satisfactory evidence that Robert B. Israel signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument. |
| Date August 31, 2016 Signed at Burnaby BC (Type or Print Name of Witness) Signed at Burnaby BC (Signature of Witness) |

| | Application No. 62/324,206 |
|--|--|
| Aug. 31 2016 | |
| Date | Paul I. Bunyk |
| City of Buracley Province of RC | SS. |
| | ctory evidence that Paul I. Bunyk signed this pluntary act for the uses and purposes mentioned in the |
| Date <u>August 31, 2016</u> (Type or Print) | Signed at Burnaby BC |
| Kimbe du Donino (Type or Print Name of Witness) | (Signature of Witness) |
| | |
| <u>Sep 2016</u> Date | Tomas J. Boothby |
| City of Burney Province of 8C | SS. |
| * | ctory evidence that Tomas J. Boothby signed this sluntary act for the uses and purposes mentioned in the |
| Date Spotember 1, 2016 (Type or Print) | Signed at Burnoby BC |
| (Type or Print Name of Witness) | (Signature of Witness) |

| Tomas James Boothby Petitioner 8018 36th Ave S Street Address Seattle, WA 98118 City, State, Zip | 2017013000969 KC DISTRICT CO OCN 73.00 PAGE-001 OF 001 01/30/2017 13:31 KING COUNTY, HA |
|---|--|
| KING COUN | TY DISTRICT COURT |
| | OF WASHINGTON |
| West Division, Seatt | tle Courthouse |
| In re the Petition of: | No. 175-00836 |
| Tomas James Boothby | ORDER CHANGING NAME (Individual) |
| information, and it appearing to the satisfac petition are true; Now therefore, it is hereby ORDER | ng reviewed the petition and any supporting etion of the court that the statements in support of the ED, ADJUDGED AND DECREED that the name of e changed to Kelly Tomas Rose Boothby |
| Dated: <u>13 January</u> , <u>2017</u> . | Judge Anne C. Harper |
| CERTIFICATION – State Of Washington, County of The undersigned, duly authorized clerk of the King of document on which this stamp is imprinted is a true Signed this Zaday of Zav | County District Court, Washington, hereby certifies that the and correct copy of the original filed in the Court. |

Court Clerk

PATENT REEL: 05**348**0 FRAME: 0**293**

Application No. 62/324,206

| Sede der 1/2016 | 4.1.1.1 |
|---------------------------------|--------------|
| Date | Aidan P. Roy |
| City of Burnaby Province of BC | SS. |

I certify that I know or have satisfactory evidence that Aidan Patrick Roy signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date <u>September 1, 2016</u>
(Type or Print)

Kimberly Domine (Type or Print Name of Witness) Signed at

(Signature of Witness)

D-WAVE SYSTEMS INC.

17327-42/6 Date

Tanya J. Rothe

General Counsel & Director of Intellectual Property

(Assignee)

(240105,573P1) 4869171_1 DOC

WHEREAS, we,

| Name | Address | |
|-------------------|---|-------|
| James A. King | 3033 Beta Avenue, Burnaby, British Columbia, V5G 4M9 CANADA | ; |
| Trevor M. Lanting | 3033 Beta Avenue, Burnaby, British Columbia, V5G 4M9 CANADA | ; and |
| Abraham J. Evert | 3033 Beta Avenue, Burnaby, British Columbia, V5G 4M9 CANADA | ; |

(hereinafter referred to as ASSIGNORS), having mailing addresses as listed above, are the joint inventors, along with Andrew D. King, Robert B. Israel, Paul I. Bunyk, Kelly T. R. Boothby (formerly Tomas J. Boothby), Steven P. Reinhardt, and Aidan P. Roy of an invention entitled "SYSTEMS AND METHODS FOR EMBEDDING PROBLEMS INTO AN ANALOG PROCESSOR," as described and claimed in the specification for which an application for United States letters patent was filed on April 13, 2017, and assigned Application No. 15/487,295;

WHEREAS,

| Corporation Name | Address |
|-------------------------|--|
| D-Wave Systems Inc. | 3033 Beta Avenue, Burnaby, British Columbia, V5G 4M9 |
| | CANADA |

(hereinafter referred to as ASSIGNEE), a Canadian corporation having a place of business at the address listed above, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions including any extensions or adjustments in term thereof and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise,

PATENT REEL: 05**398**6 FRAME: 02**6**5 and including the right to sue and collect damages for past and present infringement of said letters patent; said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

JUNE 7, 2020

City of VANCOUVER

Province of <u>BC</u>)

James A. King

SS.

I certify that I know or have satisfactory evidence that James A. King signed this instrument of their own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

Date JUNE 7, 2020
(Type or Print)

(Type or Print Name of Witness)

Signed at VANCOUCR

(Signature of Witness)

| Date | Trevor M. Lanting | |
|--|---|---------------------------------------|
| City of <u>RUDINARY</u>) | | |
| Province of <u>BC</u>) | SS. | |
| I certify that I know or have satisfacinstrument of their own free will, as a voluinstrument. | | |
| Date | Signed at <u>VANとないら</u> | <u>RC</u> |
| (Type or Print) | 1 | |
| FAYYA Z KARMAC I (Type or Print Name of Witness) | (Signature of Witness) | |
| (1) the of 1 time (value of witness) | (Signature of withess) | |
| | | |
| • | | |
| | 1 | |
| | | |
| | | |
| | * * ** | |
| Date | Abraham J. Evert | |
| City of) | | |
| <u>, , , , , , , , , , , , , , , , , , , </u> | 5\$. | |
| Province of) | | |
| I certify that I know or have satisfa- instrument of their own free will, as a volu- instrument. | ctory evidence that Abraham J. Eventary act for the uses and purposes | ert signed this s mentioned in the |
| Date | Signed at | |
| Date (Type or Print) | | |
| (Type or Frint Name of Witness) | (Signature of Witness) | |
| T. 7 | | |

3

| Date | Trevor M. Lanting |
|--|--|
| City of | SS. |
| I certify that I know or have satisfa | actory evidence that Trevor M. Lanting signed this untary act for the uses and purposes mentioned in the |
| Date(Type or Print) | Signed at |
| (Type or Print Name of Witness) | (Signature of Witness) |
| luno 22, 2020 | Bran East |
| <u>June 23, 2020</u> Date | Abraham J. Evert |
| City of Vancouver) Province of British Columbia) | SS. |
| · · · · · · · · · · · · · · · · · · · | actory evidence that Abraham J. Evert signed this untary act for the uses and purposes mentioned in the |
| Date June 23, 2020 (Type or Print) | Signed at Vancouver |
| Susan Monyo | Beryo |
| (Type or Print Name of Witness) | (Signature of Witness) |

D-WAVE SYSTEMS INC.

| 23-Jun-2020 4:43 PM PDT | TRA_ | (Assignee) |
|---------------------------|-----------------------|------------|
| Date | (Signatory Signature) | , |

<u>Tanya J. Rothe, General Counsel</u> (Assignee Signatory Name, Title)

Docket No. 240105.573/438040

4

LEGAL\46754384\1

RECORDED: 08/05/2020

PATENT REEL: 05**348**6 FRAME: 02**6**9

WHEREAS, I, Steven P. Reinhardt (hereinafter referred to as ASSIGNOR), having a post office address of 3033 Beta Avenue, Burnaby, British Columbia, Canada V5G 4M9, am a listed inventor/applicant, along with Andrew D. King, Robert B. Israel, Paul I. Bunyk, Tomas J. Boothby and Aidan P. Roy, of the provisional patent application entitled "SYSTEMS AND METHODS FOR EMBEDDING PROBLEMS INTO AN ANALOG PROCESSOR," as filed with the U.S. Patent and Trademark Office on April 18, 2016, and assigned Application No. 62/324,206;

WHEREAS, D-Wave (Government) Inc. (hereinafter referred to as ASSIGNEE), a corporation of the state of Delaware having a place of business at 2650 E. Bayshore Road, Palo Alto, California 94303, is desirous of acquiring the entire right, title and interest in and to the provisional patent application and in and to any letters patent(s) that claim the priority benefit of the provisional patent application in the United States and in any and all foreign countries;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE, the entire right, title and interest in and to said provisional patent application and the invention(s) disclosed therein, and any and all letters patent(s) which claim priority to said provisional application and any and all letters patent(s) which claim the invention(s) disclosed therein and which may be granted in the United States of America and its territorial possessions including any extensions or adjustments in term thereof and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States provisional application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, and including the right to sue and collect damages for past and present infringement of said letters patent(s); said invention, provisional application and all letters patent(s) on said invention or claiming priority to said provisional application to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for

> PATENT REEL: 05**368**0 FRAME: 02**50**

| letters patent therefor. | |
|--|---|
| September 7, 2016 Date | Steven P. Reinhardt |
| State of | Signed at - City of Rumaby Province of BC |
| | tory evidence that Steven P. Reinhardt signed this sept.? |
| Date <u>September 7, 2016</u> (Type or Print) Kimberly Domino (Type or Print Name of Witness) | Signed at Burnaby BC (Signeture of Witness) |
| <u>14 - SZP - ƏEV 6</u> Date | D-Wave (Government) Inc. (Assignee) Signature Day J. Cohve Treasurer (Name and Title) |

litigation regarding said letters patent, or for the purpose of protecting title to said invention or

(240105.573P1) 4869302_1,DOC

WHEREAS, D-Wave (Government) Inc. (hereinafter referred to as ASSIGNOR), a corporation of the State of Delaware having a place of business at 2650 E. Bayshore Road, Palo Alto, California 94303, is the owner of an invention entitled "SYSTEMS AND METHODS FOR EMBEDDING PROBLEMS INTO AN ANALOG PROCESSOR," as filed with the U.S. Patent and Trademark Office on April 18, 2016, and assigned Application No. 62/324,206;

WHEREAS, D-Wave Systems Inc. (hereinafter referred to as ASSIGNEE), a corporation of Canada having a place of business at 3033 Beta Avenue, Burnaby, British Columbia, Canada V5G 4M9, is desirous of acquiring the entire right, title and interest in and to the provisional patent application and in and to any letters patent(s) that claim the priority benefit of the provisional patent application in the United States and in any and all foreign countries;

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE, the entire right, title and interest in and to said provisional patent application and the invention(s) disclosed therein, and any and all letters patent(s) which claim priority to said provisional application and any and all letters patent(s) which claim the invention(s) disclosed therein and which may be granted in the United States of America and its territorial possessions including any extensions or adjustments in term thereof and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States provisional application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, and including the right to sue and collect damages for past and present infringement of said letters patent(s); said invention, provisional application and all letters patent(s) on said invention or claiming priority to said provisional application to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

> PATENT REEL: 05**368**0 FRAME: 028**2**

| | D-Wave (Government) Inc. |
|---|---|
| <u>//-ルツー → コノム</u> Date | (Assignor) Tanya J. Rothe, General Counsel |
| State of <u>BURIARY BL.</u>) ss. County of <u>CADAIA</u> | Tanga 3. Poute, General Counsel |
| I certify that I know or have satisfact this instrument of his/her own free will as a the instrument. | tory evidence that /AUVA J. KOUVE_signed voluntary act for the uses and purposes mentioned in |
| Date //- DO/- DE//_ (Type or Print) | Signed at Businey Le |
| (Type of Fille Name of Witness) | (Signetup Cof Witness) |
| | D-Wave Systems Inc. |
| //-N/V | Tanya J. Rothe, General Counsel |
| (240105-573P1) 4869357_LIXXC | |