PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MURRAY C. THOM	03/30/2017
AIDAN P. ROY	03/30/2017
FABIAN A. CHUDAK	03/29/2017
ZHENGBING BIAN	03/29/2017
WILLIAM G. MACREADY	03/30/2017
ROBERT B. ISRAEL	03/30/2017
TOMAS J. BOOTHBY	03/30/2017
SHEIR YARKONI	07/04/2017
YANBO XUE	11/03/2018
DMYTRO KORENKEVYCH	11/15/2018

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:	16778295

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: 240105.57001C1/465242

> PAIENI **REEL: 057081 FRAME: 0588**

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NAME OF SUBMITTER: FRANK ABRAMONTE			
SIGNATURE:	/Frank Abramonte/		
DATE SIGNED:	08/04/2021		
Total Attachments: 8			
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PATENT REEL: 057081 FRAME: 0589

ASSIGNMENT

WHEREAS, we, Murray C. Thom, Aidan P. Roy, Fabian A. Chudak, Zhengbing Bian, William G. Macready, Robert B. Israel, Tomas J. Boothby, Sheir Yarkoni, Yanbo Xue, and Dmytro Korenkevych (hereinafter referred to as ASSIGNORS), all having a mailing address of 3033 Beta Avenue, Burnaby, British Columbia, Canada V5G 4M9, are the joint inventors of an invention entitled "SYSTEMS AND METHODS FOR ANALOG PROCESSING OF PROBLEM GRAPHS HAVING ARBITRARY SIZE AND/OR CONNECTIVITY" as described and claimed in the specification for which an application for United States letters patent was filed on March 2, 2017, and assigned Application No. 15/448,361;

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 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, 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.

> PATENT REEL: 058286 FRAME: 0598

2017 Mach 30th 2/2 Agrand Murray C. Thom
City of Burnaly) ss.
Province of)
I certify that I know or have satisfactory evidence that Murray C. Thom signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.
Date Morch 30th, 2017 Signed at Burnahy, BC (Type or Print)
Kimber Jomino (Type or Print Name of Witness) (Signature of Witness)
<u>Mar 30/2017</u> Date Aidan P. Roy
City of School S
I certify that I know or have satisfactory evidence that Aidan P. Roy signed this instrument of his/her own free will, as a voluntary act for the uses and purposes mentioned in the instrument.
Date March 30, 20/7 Signed at Burnaby BC (Type or Print)
(Type or Print Name of Witness) (Signature of Witness)

Z9 MARCH 2017 Date	Fabian A. Chudak
City of BUNNAKY) Province of SC)	SS.
v	actory evidence that Fabian A. Chudak signed this oluntary act for the uses and purposes mentioned in the
Date March 29 , 2017 (Type or Print)	Signed at <u>Burnaby</u> , BC
(Type or Print Name of Witness)	(Signature of Witness)
Mar. 29, 2017 Date	Bian Hongling Zhengbing Bian
City of Burnaby Province of B. C.	SS.
	actory evidence that Zhengbing Bian signed this oluntary act for the uses and purposes mentioned in the
Date Mach 29, 2017 (Type or Print) Kimber L. Domino (Type or Print Name of Witness)	Signed at Burnahy, BC (Signature of Witness)
Number of the second of the se	

Mur 30, 20th	William G. Macready
Date	William G. Macready
City of <u>Gwaly</u>) Province of <u>GC</u>)	ss.
•	actory evidence that William G. Macready signed this oluntary act for the uses and purposes mentioned in the
Date March 30, 2017 (Type or Print)	Signed at Burnaby BC
(Type or Print Name of Witness)	(Signature of Witness)
March 30, 2017 Date	Robert B level
City of Burnaly Province of BC	SS.
instrument of his/her own free will, as a ve instrument.	actory evidence that Robert B. Israel signed this oluntary act for the uses and purposes mentioned in the
Date <u>March 30,2017</u> (Type or Print) Kimberly Domino	Signed at Burnaby, BC
(Type or Print Name of Witness)	(Signature of Witness)

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<u> </u>	
	Tomas J. Boothoy
Cital Burely	
Province of BC	\$2.
I certify that I know or have satisfactinstrument of his/her own free will, as a voinstrument.	ctory evidence that Tomas J. Hoothby signed this lumbary act for the uses and purposes mentioned in the
Date Moveh 20, 2617 (Type or Print)	Signed at Burnoby, Bic.
Kirologi L. Dichiyati (Type or Print Name of Witness)	(Signature of Witness)
July 4, 2912 Date	Sheir Yarkoni
City of Munich	
Province of Bararia Germany	
I certify that I know or have satisfa	ctory evidence that Sheir Yarkoni signed this fluntary act for the uses and purposes mentioned in the
Date 70 to 490, 2007 (Fype of Print)	Signed at Musical Correctly
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(Type or Print Name of Witness)	(Signature of Witness)

May 2th rent		
Dete		Yanbo Xue
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of his/her own free will, as a volum instrument.	tary ac	actory evidence that Yanho Xue signed this instrument t for the uses and purposes mentioned in the
Date Nov 3 1 2018		Signed at Toronto, ON
(Type of Print Name of Witness)		(Signature of Witness)
Date		Dmytro Koreakevych
City of)	SS.
Province of	.)	A.S.
		actory evidence that Dmytro Korenkevych signed this oluntary act for the uses and purposes mentioned in the
Oste (Type or Print)		Signed at
Type or Print Name of Witness)	NANNA	(Signature of Witness)

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Nov. 3td, 2018		100 M
Date		Yambo Xua
Civo: 700170)	
Province of <u>CA</u>)	SS.
		ctory evidence that Yanbo Xue signed this instrument for the uses and purposes mentioned in the
Date Nov 2 (4 , 2018)		Signed 81 Topanto . ON
Qunchao Li		<u> </u>
(Type or Print Name of Witness)		(Signature of Witness)
14/15/2018		\$\frac{1}{2}
Date		Omytro Korenkevych
civor Tounto	,))	88 .
Province of <u>OV</u>)	
I certify that I know or have instrument of his/her own free will, instrument.	satistac as a vo	ctory evidence that Dmytro Korenkevych signed this luntary act for the uses and purposes mentioned in the
Osie <u>// / 15 / 2018</u> (Type or Print)		Signed as Toronto, Ontacz
Somes Buggitia		
Type or Print Name of Witness)		(Signature of Witness)
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D-WAVE SYSTEMS INC.

_(Assignee)

(Signatory Signature)

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

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