

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5739013

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
WILLIAM G. MACREADY	02/25/2014
MANI RANJBAR	02/25/2014
FIRAS HAMZE	02/25/2014
GEORDIE ROSE	02/25/2014
SUZANNE GILDERT	02/25/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	D-WAVE SYSTEMS INC.
<b>Street Address:</b>	3033 BETA AVENUE
<b>City:</b>	BURNABY
<b>State/Country:</b>	CANADA
<b>Postal Code:</b>	V5G 4M9
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14920235
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(206)621-8783
<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>Phone:</b>	(206) 340-1000
<b>Email:</b>	SClayton@cozen.com
<b>Correspondent Name:</b>	FRANK ABRAMONTE
<b>Address Line 1:</b>	999 THIRD AVENUE
<b>Address Line 2:</b>	SUITE 1900
<b>Address Line 4:</b>	SEATTLE, WASHINGTON 98104
<b>ATTORNEY DOCKET NUMBER:</b>	240105.519C1/437968
<b>NAME OF SUBMITTER:</b>	FRANK ABRAMONTE
<b>SIGNATURE:</b>	/Frank Abramonte/
<b>DATE SIGNED:</b>	09/26/2019
<b>Total Attachments: 6</b>	

source=519C1\_Assignment#page1.tif

source=519C1\_Assignment#page2.tif

source=519C1\_Assignment#page3.tif

source=519C1\_Assignment#page4.tif

source=519C1\_Assignment#page5.tif

source=519C1\_Assignment#page6.tif

## ASSIGNMENT

WHEREAS, we, William G. Macready, Mani Ranjbar, Firas Hamze, Geordie Rose, and Suzanne Gildert (hereinafter referred to as ASSIGNORS), each having a mailing address of 3033 Beta Avenue, Burnaby, British Columbia, Canada V5G 4M9, are the joint inventors of an invention entitled "QUANTUM PROCESSOR BASED SYSTEMS AND METHODS THAT MINIMIZE AN OBJECTIVE FUNCTION," as described and claimed in the specification for which an application for United States letters patent was filed and assigned Application No. 13/806,404; which application is a national stage application filed under 35 U.S.C. 371 of International Application No. PCT/US2012/045843, accorded an International Filing Date of July 6, 2012;

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, 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 divisions, reissues and continuations thereof, 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 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.

Feb 25, 2014  
Date

William Macready  
William G. Macready

I certify that I know or have satisfactory evidence that William G. Macready signed this instrument of his own free will, as a voluntary act for the uses and purposes mentioned in the instrument.

2014 Feb 25  
Date  
(Type or Print)

MILES F.H. STEININGER  
(Type or Print Name of Witness)

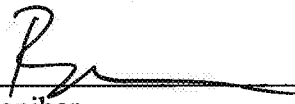
Signed at BURNABY BC

M S Tye  
(Signature of Witness)

International Application No.: PCT/US2012/045843

U.S. Application No.: 13/806,404

Feb 25, 2014  
Date


  
Mani Ranjbar

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

Date 2014 FEB 25  
(Type or Print)

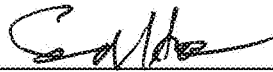
MILIES F.H. STEININGER  
(Type or Print Name of Witness)

Signed at BURNABY BC

  
(Signature of Witness)

25 Feb. 14

Date




Firas Hamze

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

Date 2014 FEB 25  
(Type or Print)

MILES F H STEININGER  
(Type or Print Name of Witness)

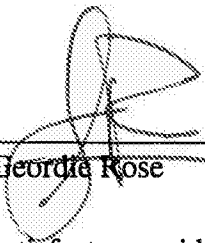
Signed at BURNABY

  
(Signature of Witness)

International Application No.: PCT/US2012/045843

U.S. Application No.: 13/806,404

FEB 25/2014  
Date

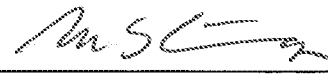
  
Georgie Rose

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

Date 2014-FEB-25  
(Type or Print)

Miles. F. H. STEININGER  
(Type or Print Name of Witness)

Signed at BURNABY BC

  
(Signature of Witness)

International Application No.: PCT/US2012/045843

U.S. Application No.: 13/806,404

25 FEB 2014

Date

  
Suzanne Gildert

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

Date

2014 FEB 25

(Type or Print)

MILES FH STEININGER

(Type or Print Name of Witness)

Signed at

BURNABY BC



(Signature of Witness)

(240105.519USPC)

2993111\_1