

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5850407

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JOSEPH NOVIELLO	08/09/2016
STEVEN COOPER	10/25/2016
LEO GOLUBOVSKY	07/27/2016
CHUNG-SIN WANG	07/27/2016
JONATHAN WAKEFIELD	07/28/2016
RECEIVING PARTY DATA	
Name:	NASDAQ, INC.
Street Address:	ONE LIBERTY PLAZA, 165 BROADWAY
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10006
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16703372
CORRESPONDENCE DATA	
Fax Number:	(703)816-4100
<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>	
Phone:	703-816-4000
Email:	PTOMAIL@nixonvan.com
Correspondent Name:	NIXON & VANDERHYE, P.C.
Address Line 1:	901 NORTH GLEBE ROAD, 11TH FLOOR
Address Line 4:	ARLINGTON, VIRGINIA 22203
ATTORNEY DOCKET NUMBER:	AC-4010-0508
NAME OF SUBMITTER:	ADAM H. CHAPIN
SIGNATURE:	/Adam H. Chapin/
DATE SIGNED:	12/04/2019
This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 5	

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Attorney Docket Number	AC-4010-0349
First Named Inventor	NOVIELLO, Joseph

INVENTOR'S DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63) USING AN APPLICATION DATA SHEET (37 CFR 1.76)

☐ Declaration Submitted With Initial Filing

OR

☒ Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.16(f)) required)

MATCHING TECHNIQUES FOR DATA TRANSACTION REQUESTS WITH PRIVATE ATTRIBUTES

(Title of the Invention)

As a below named inventor, I hereby declare that:

This declaration is directed to:

- ☐ the attached application, or
☒ United States Application Number 15/200,902 filed July 1, 2016, or
☐ PCT International application number filed on

The above-identified application was made or authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WHEREAS, the undersigned (hereinafter ASSIGNOR), has made an invention in the Application identified above.

WHEREAS, NASDAQ, INC. (hereinafter ASSIGNEE), an entity, having an office and place of business at One Liberty Plaza, 165 Broadway, New York, NY 10006, is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of Ten Dollars (\$10.00) and/or other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR by these presents hereby sells, assigns, and transfers unto the said ASSIGNEE, its successors, assigns, and legal representatives, ASSIGNOR'S entire right, title and interest in the United States of America and all foreign countries, in and to the invention as described in the aforesaid application, and to the said application and to all subsequent applications based thereon including any and all continuations, divisions, reissues, and substitutes of said application, and all resulting patents, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and the ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns, and legal representatives. It is understood and agreed that ASSIGNEE'S attorneys Nixon & Vanderhye P.C. have represented only ASSIGNEE and will continue to represent only ASSIGNEE with respect to this invention;

ASSIGNOR hereby agrees to transfer a like interest upon request of said ASSIGNEE, its successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;

ASSIGNOR hereby agrees to execute any papers by ASSIGNEE, its successors, assigns, and legal representatives, deemed essential to ASSIGNEE'S full protection and title in and to the invention hereby transferred; and

ASSIGNOR hereby agrees, upon request of ASSIGNEE, and without further remuneration, to execute any and all papers desired by ASSIGNEE, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEE.

AGREED and executed as noted below:

LEGAL NAME OF INVENTOR/JOINT INVENTOR:

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Joseph

NOVIELLO

Inventor's Signature

Date:

Witnessed by:

Name:

Signature of witness:

Date:

Attorney Docket Number	AC-4010-0349
First Named Inventor	NOVIELLO, Joseph

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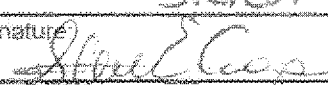
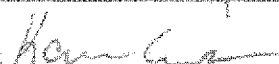
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AGREED and executed as noted below:

LEGAL NAME OF INVENTOR/JOINT INVENTOR: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
STEVEN STEVEN	COOPER
Inventor's Signature: 	Date: 10/25/2016
Witnessed by:	
Name: Karen Cooper	
Signature of witness: 	Date: 10/25/2016

Attorney Docket Number	AC-4010-0349
First Named Inventor	NOVIELLO, Joseph

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AGREED and executed as noted below:

Legal Name of Additional Joint Inventor, if any:

(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Leo

GOLUBOVSKY

Inventor's
Signature:

Leo Golubovsky

Date:

07/27/2016

Witnessed by:

Name:

Chung-Sin Wang

Signature of witness:

[Signature]

Date:

7/27/2016

Attorney Docket Number	AC-4010-0349
First Named Inventor	NOVIELLO, Joseph

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(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Chung-Sin

WANG

Inventor's
Signature:

Date:

7/27/2016

Witnessed by:

Name:

LEO GOLUBOVSKY

Signature of witness:

Date:

07/27/2016

Attorney Docket Number	AC-4010-0349
First Named Inventor	NOVIELLO, Joseph

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(E.g., Given Name (first and middle (if any)) and Family Name or Surname)

Jonathan

WAKEFIELD

Inventor's
Signature:

Date:

7/28/16

Witnessed by:

Name:

Signature of witness:

Date:

7/27/16

PATENT

RECORDED: 12/04/2019

REEL: 051178 FRAME: 0816