PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZACHARY BONIG	08/03/2016
ERIC THILL	08/03/2016
PEARCE PECK-WALDEN	08/06/2016
JOSÉ ANTONIO ACUÑA-ROHTER	08/03/2016
NEIL STEUBER	08/08/2016
JAMES BAILEY	08/03/2016

RECEIVING PARTY DATA

Name:	CHICAGO MERCANTILE EXCHANGE INC.
Street Address:	20 SOUTH WACKER DRIVE
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60606

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15232224

CORRESPONDENCE DATA

Fax Number: (312)291-0864

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.

Phone: (312) 291-0860

docket-us@lsk-iplaw.com Email:

LEMPIA SUMMERFIELD KATZ LLC **Correspondent Name:**

20 SOUTH CLARK ST Address Line 1:

Address Line 2: SUITE 600

Address Line 4: CHICAGO, ILLINOIS 60603

ATTORNEY DOCKET NUMBER:	4672-16014A
NAME OF SUBMITTER:	JAMES L. KATZ
SIGNATURE:	/James L. Katz/
DATE SIGNED:	08/19/2016

Total Attachments: 6 source=ASSGN Executed 2016-004-US1#page1.tif source=ASSGN Executed 2016-004-US1#page2.tif source=ASSGN Executed 2016-004-US1#page3.tif

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ASSIGNMENT

WHEREAS, Zachary Bonig, Eric Thill, Pearce Peck-Walden, José Antonio Acuña-Rohter, Barry Galster, Neil Steuber, James Bailey, Jake Siddall hereinafter called the "Assignors", have made the invention described in the United States patent application entitled SYSTEMS AND METHODS FOR COORDINATING PROCESSING OF INSTRUCTIONS ACROSS MULTIPLE COMPONENTS, executed by Assignors on the same date as, or on a date prior to, this Assignment;

WHEREAS, CHICAGO MERCANTILE EXCHANGE INC., a corporation organized and existing under the laws of the State of Illinois, having a place of business at 20 South Wacker Drive, Chicago, IL 60606, hereinafter called the "Assignee", desires to acquire the entire right, title and interest in and to the invention and the patent application identified above, and all patents which may be obtained for said invention, as set forth below;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other valuable and legally sufficient consideration, the receipt of which by the Assignors from the Assignee is hereby acknowledged, the Assignors have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents issuing therefrom in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; together with the right to recover all damages, including, but not limited to, a reasonable royalty, by reason of past, present, or future infringement or any other violation of patent or patent application rights; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term or terms for all such patents.

The Assignors hereby covenant and agree, for both the Assignors and the Assignors' legal representatives, that the Assignors will assist the Assignee in the

prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assigner will execute and deliver to the Assignee any and all additional papers which may be requested by the Assignee to carry out the terms of this Assignment.

The Commissioner of Patents and Trademarks is hereby authorized and requested to issue patents to the Assignee in accordance with the terms of this Assignment.

IN TESTIMONY WHEREOF, the Assignors have executed this agreement.

DATED:	8/2/2014	<u> 457 - </u>
DATED:	8/3/2016	Zachary Bon)g Eric Thill
DATED:	8/6/16	Pearce Peck-Walden
DATED:	08/03/2116	√ / / / / / / / / / / / / / / / / / / /
DATED:		Barry Galster
DATED:	8/8/2016	Néil Steuber
DATED:	8/3/16	James Bailey
DATED:		Jake Siddall

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COUNTY OF	Cook)	t.
me to be the same per appeared before me this delivered the said instruction purposes therein set for the said instruction in	said, do nerson who siday in perturbent a th. HEREOF,	, a Notary Public in and for the hereby certify that Zachary Bonig, personally known to ose name is subscribed to the foregoing instrument, person and acknowledged that (s)he signed, sealed and as his/her free and voluntary act for the uses and personally known to ose name is subscribed to the foregoing instrument, person and acknowledged that (s)he signed, sealed and as his/her free and voluntary act for the uses and personally known to ose name is subscribed to the foregoing instrument, person and acknowledged that (s)he signed, sealed and as his/her free and voluntary act for the uses and personally known to ose name is subscribed to the foregoing instrument, person ally known to ose name is subscribed to the foregoing instrument, person and acknowledged that (s)he signed, sealed and as his/her free and voluntary act for the uses and person accordingly to the foregoing instrument, person accordingly to the foregoing instrumen
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AND AND A BUILDING WINDS)	SS.
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set forth.	nsmer nee	ee and voluntary act for the uses and purposes therein
	HEREOF,	, I have hereunto set my hand and Notarial Seal, this, 2016.
		South Holes
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known to me to be the instrument, appeared be sealed and delivered the and purposes therein se	e same personation in the same	a Notary Public in and for the hereby certify that Pearce Peck-Walden, personally person whose name is subscribed to the foregoing this day in person and acknowledged that (s)he signed, strument as his/her free and voluntary act for the uses . I have hereunto set my hand and Notarial Seal, this, 2016.
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County and State afor personally known to me foregoing instrument, as (s)he signed, sealed and for the uses and purpose IN WITNESS WIDDEN day of	resaid, de to be to peared by delivered stherein IEREOF,	, a Notary Public in and for the do hereby certify that José Antonio Acuña-Rohter, the same person whose name is subscribed to the before me this day in person and acknowledged that at the said instrument as his/her free and voluntary act
My Commission Expires	: <u>-11</u>	
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me to be the same per appeared before me this delivered the said inst purposes therein set for	erson who s day in pe trument a th.	a Notary Public in and for the hereby certify that James Bailey, personally known to ose name is subscribed to the foregoing instrument, person and acknowledged that (s)he signed, sealed and as his/her free and voluntary act for the uses and I have hereunto set my hand and Notarial Seal, this
My Commission Expires	s: <u>01 </u>	Notary Public OFFICIAL SEAL JANET P HABINA Notary Public - State of Illinois My Commission Expires Sep 25, 2017
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I,		
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