

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ROBERTO MALAMUT	11/18/2016
NEERAV SHAH	11/18/2016
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<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10018
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15198695
<b>Application Number:</b>	62187552
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	L167.0001US1
<b>NAME OF SUBMITTER:</b>	BRIAN D. KAUL
<b>SIGNATURE:</b>	/Brian D. Kaul/
<b>DATE SIGNED:</b>	11/21/2016
<b>Total Attachments: 3</b>	
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**ASSIGNMENT-DECLARATION**  
**FOR PRIORITY APPLICATION ENTERING UNITED STATES**

Attorney Docket No.

L167.0001US1

**SPECIFICATION AND INVENTORSHIP IDENTIFICATION**

This assignment-declaration is directed to the subject matter which is claimed in the application entitled FORECASTING TRADING ALGORITHM PERFORMANCE, the specification of which having the above title and/or attorney docket number L167.0001US1

- is attached hereto, or as previously filed with the USPTO,
- based on U.S. Provisional Application No. 62/187,552, filed July 1, 2016;
- was filed on June 30, 2016 as Appln. No. 15/198,695,
- was amended on ---, and/or
- based on French Patent Application No. ---, filed on ---;
- based on European Patent Application No. ---, filed on ---;
- was described and claimed in PCT International Application No. --- filed on --- and as amended with any Preliminary Amendment filed with National Stage entry.

**A. ASSIGNMENT**

WHEREAS, Liquidnet Holdings, Inc. (hereinafter referred to as Assignee), a corporation organized and existing under the laws of Delaware, and having offices at 498 Seventh Avenue, 15<sup>th</sup> Floor, New York, New York 10018, United States, is desirous of acquiring the entire right, title and interest in and to the above-identified invention(s), the application(s) and any and all Letters Patent(s) or similar legal protection, foreign or domestic, to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I transfer to Assignee, its successors and assigns, my entire right, title and interest in and to the invention(s), the above-identified application(s), any provisional to which the benefit is claimed, all inventions and improvements which are disclosed in the patent applications, all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent(s) which have been or shall be filed in the United States on any of said inventions and/or improvements, all rights of priority resulting from the filing of the above-identified patent application(s), and all Letters Patent or similar legal protection issuing thereon; and I authorize the Director of the United States Patent and Trademark Office to issue the Letters Patent or similar legal protection to the Assignee.

I authorize the Assignee, its successors and assigns, to insert in this instrument the filing date and serial number of the application when ascertained.

I authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all countries.

I represent to the Assignee, its successors and assigns, that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I, my executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

**B. DECLARATION**

**AUTHORIZATION TO PERMIT ACCESS TO APPLICATION BY PARTICIPATING OFFICE**

- If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual

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Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified patent application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified patent application is filed to have access to the above-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the above-identified patent application with respect to: 1) the above-identified patent application-as-filed; 2) any foreign application to which the above-identified patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application; and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

## STATEMENTS

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent Office all information known to me to be material to patentability as defined in 37 C.F.R. 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part.

If the above-identified application is to be or was filed on or after September 16, 2012:

I declare that 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.

If the above-identified application was filed before September 16, 2012:

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed, and for which a patent is sought, on the subject matter which is claimed in the above-identified application.

I declare that all statements made herein that are of my own knowledge are true and that all statements that are made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

## DESIGNATION OF CORRESPONDENCE ADDRESS

Please address all correspondence and telephone calls to **Brian D. Kaul** in care of:

Customer Number  
27367

-2 of 3-

PATENT  
REEL: 040387 FRAME: 0795

# ASSIGNMENT-DECLARATION

FOR PRIORITY APPLICATION ENTERING UNITED STATES

Attorney Docket No.

L167.0001US1

Roberto Malamut

Signature of Inventor (1)

Date : 11/18/16

Roberto Malamut

Printed Name of Inventor

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Neerav Shah

Signature of Inventor (2)

Date : 11/18/2016

Neerav Shah

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THOMAS P. SCULLY

Signature of Witness

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