# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN

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HIGH FREQUENCY SYSTEMS LLC,	TRADING	
	Plaintiff,	Case No.
		Honorable:
v.		
LIQUIDNET, INC.,		JURY TRIAL DEMANDED
	Defendant.	

## **COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff High Frequency Trading Systems LLC ("HFTS" or "Plaintiff"), for its Complaint against Defendant Liquidnet, Inc., ("Liquidnet" or "Defendant"), alleges the following:

### NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 et seq.

#### THE PARTIES

- 2. Plaintiff HFTS is a limited liability company organized under the laws of the State of Texas and is qualified to do business in the State of Michigan.
- 3. Upon information and belief, Liquidnet is a corporation organized and existing under the laws of Delaware and a registered agent for service of process at 160 Greentree Drive, Suite 101, Dover, DE 19904. Upon information and belief, Liquidnet sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce and that incorporate infringing

technology knowing that they would be sold in this judicial district and elsewhere in the United States.

## **JURISDICTION AND VENUE**

- 4. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.
  - 5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 6. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, Defendant conducts business in this district, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.
- 7. On information and belief, Defendant is subject to this Court's general and specific personal jurisdiction because Defendant has sufficient minimum contacts within the State of Michigan and this district (including via sales of Defendant's products and services), pursuant to due process and/or the Michigan Long Arm Statute, because Defendant purposefully availed itself of the privileges of conducting business in the State of Michigan and in this District, because Defendant regularly conducts and solicits business within the State of Michigan and within this District, and because HFTS's causes of action arise directly from Defendant's business contacts and other activities in the State of Michigan and this District.

### COUNT I – INFRINGEMENT OF U.S. PATENT NO. 7,231,363

- 8. The allegations set forth in the foregoing paragraphs 1 through 7 are incorporated into this First Claim for Relief.
- 9. On June 12, 2007, U.S. Patent No. 7,231,363 ("the '363 patent"), entitled "Method and System for Rebrokering Orders in a Trading System," was duly and legally issued by the United States Patent and Trademark Office. The '363 patent was subjected to *inter partes*

reexamination and, on March 8, 2011, the USPTO duly and legally issued a reexamination certificate. A true and correct copy of the '363 patent is attached as Exhibit 1.

- 10. Webster Hughes and Charles Fefferman are the named inventors of the '363 patent.
- 11. Dr. Hughes holds a PhD from Princeton University and a BA from the University of North Carolina at Chapel Hill. Dr. Hughes is the co-inventor of two patents including the '363 patent and teaches a seminar on Mortgage Backed Securities at UNC Kenan-Flagler Business School.
- 12. Dr. Fefferman earned bachelor's degrees in physics and mathematics at the age of 17 from the University of Marlyand as well as a PhD from Princeton University at the age of 20. Dr. Fefferman achieved a full professorship at the University of Chicago at the age of twenty-two, making him the youngest full professor ever appointed in the United States. Dr. Fefferman was awarded the Fields Medal in 1978 for his work in multidimensional complex analysis. Viewed as one of the highest honors a mathematician can achieve, the Fields Medal is often described as the mathematician's Nobel Prize.
- 13. The inventions of the '363 resolve technical problems related to the use of computerized trading methods and systems. For example, the inventions allow flexibility in the interaction between participants in electronic trading systems.
- 14. The claims of the '363 patent do not merely recite the performance of some business practice known from the pre-Internet world along with the requirement to perform it on the Internet. Instead, the claims of the '363 patent recite one or more inventive concepts that are rooted in computerized trading technology, and overcome problems specifically arising in the realm of computerized trading technologies.

- 15. The claims of the '363 patent recite an invention that is not merely the routine or conventional use of the trading systems and methods. Instead, the invention connects external broker-dealers and other intermediaries with investors to facilitate the expeditious and efficient proliferation of investment transactions for financial instruments. The '363 patent claims thus specify how interactions between participants in computerized trading systems are manipulated to yield a desired result.
- 16. In particular, claim 1 of the '363 patent recites a method for re-brokering orders in an electronic trading system in which a broker-dealer using the system receives an initial order for a financial instrument and re-brokers the order on the same or modified terms; and in which additional broker-dealers using the system receive the re-brokered order and have similar options for re-brokering said order, enabling the quick proliferation of orders throughout the system. Moreover, the method involves identifying and executing a chain of transactions to transfer ownership of the financial instrument between the party placing the initial order and the final counterparty to the chain of transactions filling the order.
- 17. The technology claimed in the '363 patent thus integrates single, direct party-to-counterparty orders negotiated between principals into an electronic system comprising a larger community of investors and dealers who can communicate seamlessly and anonymously through their existing network of counterparty relationships to fill orders placed on the system.
- 18. The technology claimed in the '363 patent does not preempt all ways of using computerized trading systems, nor preempt the use of all computerized trading systems, nor preempt any other well-known or prior art technology.

- 19. Accordingly, each claim of the '363 patent recites a combination of elements sufficient to ensure that the claim in practice amounts to significantly more than a patent on an ineligible concept.
- 20. HFTS is the assignee and owner of the right, title and interest in and to the '363 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.
- 21. Upon information and belief, Defendant has and continues to directly infringe one or more claims of the '363 patent by making, using, selling, importing and/or providing and causing to be used a computerized trading system platform, in which the platform enables the execution of intermediate orders by broker-dealers and/or other intermediaries in response to an order by an investor, which by way of example includes Defendant's Liquidnet Fixed Income ATS (the "Accused Instrumentalities").
- 22. On information and belief, Liquidnet Fixed Income ATS is marketed, provided to, and/or used by Defendant's partners, clients, customers and end users across the country and in this District.
- 23. Defendant was made aware of the '363 patent and its infringement thereof at least as early as the filing of this Complaint.
- 24. Upon information and belief, since at least the time Defendant received notice, Defendant has induced and continues to induce others to infringe at least one claim of the '363 patent under 35 U.S.C. § 271(b) by, among other things, and with specific intent or willful blindness, actively aiding and abetting others to infringe, including but not limited to Defendant's partners, clients, customers, and end users, whose use of the Accused Instrumentalities constitutes direct infringement of at least one claim of the '363 patent.

- 25. In particular, Defendant's actions that aid and abet others such as its partners, customers, clients, and end users to infringe include advertising and distributing the Accused Instrumentalities and providing instruction materials, training, and services regarding the Accused Instrumentalities. On information and belief, Defendant has engaged in such actions with specific intent to cause infringement or with willful blindness to the resulting infringement because Defendant has had actual knowledge of the '363 patent and knowledge that its acts were inducing infringement of the '363 patent since at least the date Defendant received notice that such activities infringed the '363 patent.
- 26. Upon information and belief, Defendant is liable as a contributory infringer of the '363 patent under 35 U.S.C. § 271(c) by offering to sell, selling and importing into the United States computerized trading platforms to be especially made or adapted for use in an infringement of the '363 patent. The Accused Instrumentalities are a material component for use in practicing the '363 patent and are specifically made and are not a staple article of commerce suitable for substantial non-infringing use.
  - 27. HFTS has been harmed by Defendant's infringing activities.

#### **JURY DEMAND**

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, HFTS demands a trial by jury on all issues triable as such.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff HFTS demands judgment for itself and against Defendant as follows:

- A. An adjudication that Defendant has infringed the '363 patent;
- B. An award of damages to be paid by Defendant adequate to compensate HFTS for Defendant's past infringement of the '363 patent, and any continuing or future infringement

through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

- C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and
- D. An award to HFTS of such further relief at law or in equity as the Court deems just and proper.

Dated: August 22, 2016 JACKIER GOULD, P.C.

/s/

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