#### UNITED STATES PATENT AND TRADEMARK OFFICE

\_\_\_\_

#### BEFORE THE PATENT TRIAL AND APPEAL BOARD

IBG LLC; INTERACTIVE BROKERS LLC;
TRADESTATION GROUP, INC.; TRADESTATION SECURITIES, INC.;
TRADESTATION TECHNOLOGIES, INC.;
IBFX, INC.; CQG, INC.; and CQGT, LLC
Petitioners

v.

## TRADING TECHNOLOGIES INTERNATIONAL, INC. Patent Owner

Patent No. 7,533,056

PETITION FOR COVERED BUSINESS METHOD REVIEW UNDER 35 U.S.C. § 321 and § 18 of the LEAHY-SMITH AMERICA INVENTS ACT

### Mail Stop PATENT BOARD

Patent Trial and Appeal Board U.S. Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450



## **Table of Contents**

I.	Overview		
II.	Mandatory Notices		
III.	Grounds for Standing.		
	A.	Petitioners are eligible to request a CBM review.	
	B.	Petitioners are not estopped or barred	
	C.	The '056 patent is a Covered Business Method patent	
IV.	Overview of the '056 Patent		
	A.	Graphing bids and offers as described in the '056 patent	
	B.	The claimed graphing and user order entry11	
	C.	Prosecution History	
V.	Leve	l of ordinary skill in the art at the time of invention	
VI.	Claim construction		
	A.	Price axis	
	B.	Offer and bid indicators "representing quantity"15	
	C.	Default16	
	D.	Indicators, icons and tokens	
	E.	Receiving a user input indicating a desired price for an order by selection of one of a plurality of locations along the price axis20	
	F.	Other terms	
VII.	Grounds for challenging claims 1-15 of the '056 patent		



	A.	All applied references are prior art to the '056 patent, which claims an earliest priority date of April 9, 199921
	B.	The multiple grounds of rejection under §103 are not redundant22
	C.	The Board should not deny this Petition under § 325(d)24
VIII.	Clain	ns 1-15 are unpatentable under § 10124
	A.	The claims are directed to the abstract idea of graphing bids and offers to help a trader make an order ( <i>Alice</i> Step 1)
	B.	The claims do not recite an inventive concept (Alice Step 2)30
	C.	The absence of complete preemption does not demonstrate patent eligibility
	D.	The claims are not rooted in computer technology33
	E.	TT v. CQG is not controlling precedent36
	F.	The dependent claims also recite non-statutory subject matter37
IX.	TSE,	Togher, Schott and Cooper render obvious Claims 1-1538
	A.	The combination of TSE, Togher, Schott and Cooper renders obvious independent claim 1
	B.	Dependent claims 2-4
	C.	Dependent claim 5
	D.	Dependent claim 6
	E.	Dependent claim 753
	F.	Dependent claim 8
	G.	Dependent claim 955
	H.	Dependent claim 1056

	I.	Dependent claims 11 and 12
	J.	Dependent claims 13 and 14
	K.	Dependent claim 15
X.	Silve	rman, Togher, Cooper, and Hogan render obvious claims 1-1560
	A.	The combination of Silverman, Togher, Cooper and Hogan renders obvious independent claim 160
	B.	Dependent claims 2-471
	C.	Dependent claim 5
	D.	Dependent claim 6
	E.	Dependent claim 774
	F.	Dependent claim 874
	G.	Dependent claim 975
	H.	Dependent claim 1075
	I.	Dependent claims 11 and 1276
	J.	Dependent claims 13 and 14
	K.	Dependent claim 1579
XI.	Conc	lusion80

## **Petitioner's Exhibit List**

Ex. No.	Description
1001	U.S. Patent No. 7,533,056 to Friesen et al. ('056 patent'')
1002	File History of Application Ser. No. 11/417,544, which became the '056 patent, as filed and obtained from PAIR ('056 Patent File History'')
1003	"Futures/Option Purchasing System Trading Terminal Operation Guide," Tokyo Stock Exchange ("TSE JP")
1004	Certified Translation of "Futures/Option Purchasing System Trading Terminal Operation Guide" ("TSE")
1005	Certificate of Translation for "Futures/Option Purchasing System Trading Terminal Operation Guide" ("TSE Certificate")
1006	History of the American and NASDAQ Stock Exchanges, Business Reference Services, The Library of Congress
1007	Deposition Transcript of Atsushi Kawashima, <i>Trading Technologies International, Inc.</i> , v. eSPEED, Inc., Case No. 04-cv-5312, United States District Court, Northern District of Illinois, Eastern Division, dated November 21, 2005 ("Depo. Transcript")
1008	U.S. Patent No. 5,375,055 to Togher et al. ("Togher")
1009	U.S. Patent No. 5,619,631 to Schott ("Schott")
1010	U.S. Patent No. 5,136,501 to Silverman et al. ("Silverman")
1011	U.S. Patent No. 5,414,809 to Hogan et al. ("Hogan")
1012	U.S. Patent No. 5,297,031 to Gutterman et al. ("Gutterman")
1013	U.S. Patent No. 5,454,104 to Steidlmayer et al. ("Steidlmayer")
1014	Reuters Globex User Guide, June 1995 ("Globex")
1015	Alan Cooper, "About Face: The Essentials of User Interface Design," First Edition, 1995. ("Cooper")
1016	Edward R. Tufte, "The Visual Display of Quantitative Information," 1983 ("Tufte VDQI")
1017	Edward R. Tufte, "Envisioning Information," Third Edition, December 1992 ("Tufte EI")



# DOCKET

## Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

### **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

### **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

#### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

