

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5403034

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
VIRTU ITG SOFTWARE SOLUTIONS LLC		03/01/2019
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	U.S. BANK NATIONAL ASSOCIATION	
<b>Street Address:</b>	60 LIVINGSTON AVENUE	
<b>City:</b>	ST. PAUL	
<b>State/Country:</b>	MINNESOTA	
<b>Postal Code:</b>	55107	
<b>PROPERTY NUMBERS Total: 108</b>		
<b>Property Type</b>	<b>Number</b>	
Patent Number:	7162447	
Patent Number:	7308428	
Patent Number:	7337137	
Patent Number:	7356500	
Patent Number:	7340533	
Patent Number:	7428506	
Patent Number:	7533048	
Patent Number:	7539636	
Patent Number:	7565313	
Patent Number:	7613647	
Patent Number:	7680722	
Patent Number:	7680715	
Patent Number:	7680718	
Patent Number:	7685052	
Patent Number:	7752099	
Patent Number:	7778919	
Patent Number:	7814000	
Patent Number:	7853510	
Patent Number:	7865425	
Patent Number:	7877318	

PATENT

Property Type	Number
Patent Number:	7882015
Patent Number:	7904365
Patent Number:	7908206
Patent Number:	7908205
Patent Number:	7917425
Patent Number:	7974906
Patent Number:	7983982
Patent Number:	7996261
Patent Number:	8001033
Patent Number:	8010438
Patent Number:	8015094
Patent Number:	8019670
Patent Number:	8032441
Patent Number:	8041628
Patent Number:	8069106
Patent Number:	8082204
Patent Number:	8095456
Patent Number:	8103579
Patent Number:	8108295
Patent Number:	8121933
Patent Number:	8140416
Patent Number:	8140427
Patent Number:	8165954
Patent Number:	8190510
Patent Number:	8200566
Patent Number:	8229834
Patent Number:	8239302
Patent Number:	8260696
Patent Number:	8266045
Patent Number:	8271366
Patent Number:	8306900
Patent Number:	8306904
Patent Number:	8306906
Patent Number:	8341067
Patent Number:	8359253
Patent Number:	8407127
Patent Number:	8412619
Patent Number:	8412621

Property Type	Number
Patent Number:	8429054
Patent Number:	8442902
Patent Number:	8447649
Patent Number:	8521637
Patent Number:	8533100
Patent Number:	8577772
Patent Number:	8635144
Patent Number:	8635141
Patent Number:	8635147
Patent Number:	8660925
Patent Number:	8706608
Patent Number:	8725619
Patent Number:	8732071
Patent Number:	8738502
Patent Number:	8744952
Patent Number:	8751363
Patent Number:	8775298
Patent Number:	8788399
Patent Number:	8812383
Patent Number:	9619839
Patent Number:	9767514
Patent Number:	9799073
Patent Number:	9978102
Patent Number:	10140656
Application Number:	11311885
Application Number:	11976433
Application Number:	12180129
Application Number:	12471185
Application Number:	12876929
Application Number:	13022420
Application Number:	13185929
Application Number:	15220978
Application Number:	13668566
Application Number:	13840862
Application Number:	13867760
Application Number:	14010394
Application Number:	14070808
Application Number:	14160212

Property Type	Number
Application Number:	14286496
Application Number:	14282833
Application Number:	14299821
Application Number:	14334777
Application Number:	62722573
Application Number:	15707652
Application Number:	15790539
Application Number:	15916974
Application Number:	15732753
Application Number:	15948430
Application Number:	15970445
Application Number:	15980380

#### CORRESPONDENCE DATA

##### Fax Number:

*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.*

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cadinolfi@paulweiss.com

Correspondent Name: ALEXANDER STARK  
Address Line 1: PAUL WEISS RIFKIND WHARTON & GARRISON LLP  
Address Line 2: 1285 AVENUE OF THE AMERICAS  
Address Line 4: NEW YORK, NEW YORK 10019-6064

ATTORNEY DOCKET NUMBER:	18770-037
NAME OF SUBMITTER:	ALEXANDER STARK
SIGNATURE:	/Alexander Stark/
DATE SIGNED:	03/04/2019

#### Total Attachments: 11

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PATENT SECURITY AGREEMENT (SECOND LIEN)

PATENT SECURITY AGREEMENT (SECOND LIEN) dated as of March 1, 2019 (this “Agreement”), among Virtu ITG Software Solutions LLC (the “Grantor”) and U.S. Bank National Association, as collateral agent (in such capacity, together with its successors in such capacity, the “Collateral Agent”).

Reference is made to the Second Lien Collateral Agreement dated as of July 20, 2017 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “Collateral Agreement”), among Virtu Financial LLC, VFH Parent LLC, Orchestra Co-Issuer, Inc., each other Grantor party thereto and the Collateral Agent. In connection with the requirements of the Collateral Agreement, the parties hereto agree as follows:

SECTION 1. Terms. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the Collateral Agreement or the Indenture, as applicable. The rules of construction specified in Section 1.01(b) of the Collateral Agreement also apply to this Agreement.

SECTION 2. Grant of Security Interest. As security for the payment or performance, as the case may be, in full of the Secured Obligations, the Grantor hereby grants to the Collateral Agent, its successors and assigns, for the benefit of the Secured Parties, a security interest (the “Security Interest”) in all of such Grantor’s right, title and interest in, to and under any Patents now owned or at any time hereafter acquired by such Grantor, including those listed on Schedule I (the “Patent Collateral”).

SECTION 3. Collateral Agreement. The Security Interest granted to the Collateral Agent herein is granted in furtherance, and not in limitation, of the security interests granted to the Collateral Agent pursuant to the Collateral Agreement. The Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the Patent Collateral are more fully set forth in the Collateral Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the Collateral Agreement, the terms of the Collateral Agreement shall govern.

SECTION 4. Counterparts. This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original but all of which when taken together shall constitute a single contract. Delivery of an executed signature page to this Agreement by facsimile or other electronic transmission shall be effective as delivery of a manually signed counterpart of this Agreement.

SECTION 5. Intercreditor Agreement. Notwithstanding anything herein to the contrary, (i) the liens and security interests granted to the Collateral Agent pursuant to this Agreement are expressly subject and subordinate to the liens and security interests granted in favor of the Senior Secured Parties (as defined in the Intercreditor Agreement), including liens and security interests granted to the Senior Credit Facility Agent pursuant to or in connection with the Senior Credit Agreement, and (ii) the exercise of any right or remedy by the Collateral Agent hereunder is subject to the limitations and provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the terms of this Agreement, the terms of the Intercreditor Agreement shall govern.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement  
as of the day and year first above written.

VIRTU ITG SOFTWARE SOLUTIONS LLC

By: 


Name: Joseph Molluso

Title: Chief Financial Officer

[SIGNATURE PAGE TO ITG PATENT SECURITY AGREEMENT - SECOND LIEN]

**PATENT**  
**REEL: 048498 FRAME: 0607**

U.S. BANK NATIONAL ASSOCIATION, as  
Collateral Agent,

By   
Name: Richard Prokosch  
Title: Vice President

[SIGNATURE PAGE TO ITG PATENT SECURITY AGREEMENT – SECOND LIEN]

**PATENT**  
**REEL: 048498 FRAME: 0608**

## Schedule I

**U.S. Patents and Patent Applications**

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	METHOD AND SYSTEM FOR OBTAINING A DISCOVERED PRICE	7,162,447
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR DISPLAYING MARKET INFORMATION	7,308,428
ITG Software Solutions, Inc.	INVESTMENT PORTFOLIO OPTIMIZATION SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT	7,337,137
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,356,500
ITG Software Solutions, Inc.	AUTOMATED BATCH AUCTIONS IN CONJUNCTION WITH CONTINUOUS FINANCIAL MARKETS	7,430,533
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,428,506
ITG Software Solutions, Inc.	FAIR VALUE MODEL BASED SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR VALUING FOREIGN-BASED SECURITIES IN A MUTUAL FUND	7,533,048
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR ESTIMATING TRANSACTION COSTS RELATED TO TRADING A SECURITY	7,539,636
ITG Software Solutions, Inc.	METHOD AND SYSTEM FOR MANAGING DISTRIBUTED TRADING DATA	7,565,313
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR EXECUTING STRATEGY SECURITY TRADING	7,613,647
ITG Software Solutions, Inc.	DYNAMIC AGGRESSIVE/PASSIVE PEGGED TRADING	7,680,722
ITG Software Solutions, Inc.	SYSTEM AND METHODS FOR PROVIDING ANONYMOUS REQUESTS FOR QUOTES FOR FINANCIAL INSTRUMENTS	7,680,715
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR GENERATING REAL-TIME INDICATORS IN A TRADING LIST OR PORTFOLIO	7,680,718



<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	CONFIDENTIAL BLOCK TRADING SYSTEM AND METHOD	7,685,052
ITG Software Solutions, Inc.	FACTOR RISK MODEL BASED SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR GENERATING RISK FORECASTS	7,752,099
ITG Software Solutions, Inc.	METHOD FOR MANAGING DISTRIBUTED TRADING DATA	7,778,919
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,814,000
ITG Software Solutions, Inc.	METHOD AND SYSTEM FOR MULTIPLE PORTFOLIO OPTIMIZATION	7,853,510
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,865,425
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,877,318
ITG Software Solutions, Inc.	BLOCK TRADING SYSTEM AND METHOD PROVIDING PRICE IMPROVEMENT TO AGGRESSIVE ORDERS	7,882,015
ITG Software Solutions, Inc.	MINIMIZING SECURITY HOLDINGS RISK DURING PORTFOLIO TRADING	7,904,365
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,908,206
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,908,205
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	7,917,425
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR ESTIMATING AND OPTIMIZING TRANSACTION COSTS	7,974,906
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR EXECUTING STRATEGY SECURITY TRADING	7,983,982

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	systems and methods for increasing participation of liquidity providers on crossing system	7,996,261
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR GENERATING REAL-TIME INDICATORS IN A TRADING LIST OR PORTFOLIO	8,001,033
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	8,010,438
ITG Software Solutions, Inc.	FAIR VALUE MODEL BASED SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR VALUING FOREIGN-BASED SECURITIES IN A MUTUAL FUND	8,015,094
ITG Software Solutions, Inc.	FACTOR RISK MODEL BASED SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR GENERATING RISK FORECASTS	8,019,670
ITG Software Solutions, Inc.	MANAGING SECURITY HOLDINGS RISK DURING PORTFOLIO TRADING	8,032,441
ITG Software Solutions, Inc.	METHOD FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	8,041,628
ITG Software Solutions, Inc.	BLOCK TRADING SYSTEM AND METHOD PROVIDING PRICE IMPROVEMENT TO AGGRESSIVE ORDERS	8,069,106
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR TRADING A TRADE LIST IN FINANCIAL MARKETS	8,082,204
ITG Software Solutions, Inc.	BLOCK TRADING SYSTEM AND METHOD PROVIDING PRICE IMPROVEMENT TO AGGRESSIVE ORDERS	8,095,456
ITG Software Solutions, Inc.	SYSTEMS AND METHODS REGARDING TARGETED DISSEMINATION	8,103,579
ITG Software Solutions, Inc.	DYNAMIC AGGRESSIVE/PASSIVE PEGGED TRADING	8,108,295
ITG Software Solutions, Inc.	SYSTEM, METHOD AND PROGRAM FOR PREVENTING GAMING IN A TRADING SYSTEM	8,121,933
ITG Software Solutions, Inc.	ALGORITHMIC TRADING SYSTEM AND METHOD	8,140,416

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	SYSTEMS, METHODS AND COMPUTER PROGRAM PRODUCTS FOR ADAPTIVE TRANSACTION COST ESTIMATION	8,140,427
ITG Software Solutions, Inc.	BLOCK TRADING SYSTEM AND METHOD PROVIDING PRICE IMPROVEMENT TO AGGRESSIVE ORDERS	8,165,954
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR ESTIMATING AND OPTIMIZING TRANSACTION COSTS	8,190,510
ITG Software Solutions, Inc.	FAIR VALUE MODEL BASED SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR VALUING FOREIGN-BASED SECURITIES IN A MUTUAL FUND	8,200,566
ITG Software Solutions, Inc.	SYSTEM, METHOD AND PROGRAM FOR AGENCY COST ESTIMATION	8,229,834
ITG Software Solutions, Inc.	MINIMIZING SECURITY HOLDINGS RISK DURING PORTFOLIO TRADING	8,239,302
ITG Software Solutions, Inc.	METHOD AND SYSTEM FOR PROVIDING AGGREGATION OF TRADING ON MULTIPLE ALTERNATIVE TRADING SYSTEMS	8,260,696
ITG Software Solutions, Inc.	METHODS AND SYSTEM FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	8,266,045
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR PROVIDING HIGH PERFORMANCE COMPLIANCE SERVICES USING PRE-CALCULATED RULE EVALUATION	8,271,366
ITG Software Solutions, Inc.	SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR EXECUTING A BUY OR SELL ORDER	8,306,900
ITG Software Solutions, Inc.	SYSTEMS AND METHODS RELATED TO LIQUIDITY AGGREGATION	8,306,904
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR TRADING A TRADE LIST IN FINANCIAL MARKETS	8,306,906
ITG Software Solutions, Inc.	APPARATUS AND METHOD FOR TRADE AGGREGATION OF TRADE ALLOCATIONS AND SETTLEMENTS	8,341,067
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR PROVIDING ANONYMOUS REQUESTS FOR QUOTES FOR FINANCIAL INSTRUMENTS	8,359,253

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	FAIR VALUE MODEL BASED SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR VALUING FOREIGN-BASED SECURITIES IN A MUTUAL FUND	8,407,127
ITG Software Solutions, Inc.	SYSTEMS AND METHODS REGARDING TARGETED DISSEMINATION	8,412,619
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR ESTIMATING AND OPTIMIZING TRANSACTION COSTS	8,412,621
ITG Software Solutions, Inc.	MANAGING SECURITY HOLDINGS RISK DURING PORTFOLIO TRADING	8,429,054
ITG Software Solutions, Inc.	SYSTEM, METHOD AND PROGRAM FOR PREVENTING GAMING IN A TRADING SYSTEM	8,442,902
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR INCREASING PARTICIPATION OF LIQUIDITY PROVIDERS ON CROSSING SYSTEM	8,447,649
ITG Software Solutions, Inc.	SYSTEMS, METHODS, AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING REAL TIME ANALYTIC WIDGETS IN A FINANCIAL TRADING SYSTEM	8,521,637
ITG Software Solutions, Inc.	AUTOMATED BATCH AUCTIONS IN CONJUNCTION WITH CONTINUOUS FINANCIAL MARKETS	8,533,100
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR GENERATING LIQUIDITY	8,577,772
ITG Software Solutions, Inc.	CONFIDENTIAL BLOCK TRADING SYSTEM AND METHOD	8,635,144
ITG Software Solutions, Inc.	METHOD AND SYSTEM FOR MULTIPLE PORTFOLIO OPTIMIZATION	8,635,141
ITG Software Solutions, Inc.	SYSTEM, METHOD AND PROGRAM FOR AGENCY COST ESTIMATION	8,635,147
ITG Software Solutions, Inc.	ALGORITHMIC TRADING SYSTEM AND METHOD	8,660,925
ITG Software Solutions, Inc.	DYNAMIC AGGRESSIVE/PASSIVE PEGGED TRADING	8,706,608

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	FAIR VALUE MODEL BASED SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR VALUING FOREIGN-BASED SECURITIES IN A MUTUAL FUND	8,725,619
ITG Software Solutions, Inc.	SYSTEMS AND METHODS REGARDING TARGETED DISSEMINATION	8,732,071
ITG Software Solutions, Inc.	ELECTRONIC TRADING SYSTEM AND METHOD THAT PROVIDE REAL-TIME TRADE ANALYSIS	8,738,502
ITG Software Solutions, Inc.	METHOD AND APPARATUS FOR IMPROVED ELECTRONIC TRADING	8,744,952
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR EXECUTING STRATEGY SECURITY TRADING	8,751,363
ITG Software Solutions, Inc.	METHODS AND SYSTEMS FOR DIRECTING AND EXECUTING CERTIFIED TRADING INTERESTS	8,775,298
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR TRADING A TRADE LIST IN FINANCIAL MARKETS	8,788,399
ITG Software Solutions, Inc.	APPARATUS AND METHOD FOR TRADE AGGREGATION OF TRADE ALLOCATIONS AND SETTLEMENTS	8,812,383
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR VIEWING AND TRADING FUTURES	9,619,839
ITG Software Solutions, Inc.	APPARATUS AND METHOD FOR TRADE AGGREGATION OF TRADE ALLOCATIONS AND SETTLEMENTS	9,767,514
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR ELECTRONIC TRADING	9,799,073
ITG Software Solutions, Inc.	APPARATUS AND METHOD FOR TRADE AGGREGATION OF TRADE ALLOCATIONS AND SETTLEMENTS	9,978,102
ITG Software Solutions, Inc.	CONFIDENTIAL BLOCK TRADING SYSTEM AND METHOD	10,140,656
ITG Software Solutions, Inc.	TRADING SYSTEM, METHOD, AND APPARATUS WITH CENTRAL COUNTERPARTY CLEARING	11/311,885

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR POST-TRADE TRANSACTION COST ESTIMATION OF TRANSACTION COSTS	11/976,433
ITG Software Solutions, Inc.	SYSTEMS, METHODS AND COMPUTER PROGRAM PRODUCTS FOR CREATING A TURNOVER EFFICIENT FRONTIER FOR AN INVESTMENT PORTFOLIO	12/180,129
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR ESTIMATING TRANSACTION COSTS RELATED TO TRADING A SECURITY	12/471,185
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR EVALUATING SECURITY TRADING TRANSACTION COSTS	12/876,929
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR PROVIDING ACCESS TO FINANCIAL TRADING SERVICES	13/022,420
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR GENERATING REAL-TIME INDICATORS IN A TRADING LIST OR PORTFOLIO	13/185,929
ITG Software Solutions, Inc.	MINIMIZING SECURITY HOLDINGS RISK DURING PORTFOLIO TRADING	15/220,978
ITG Software Solutions, Inc.	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR EXECUTING A BUY OR SELL ORDER	13/668,566
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR ESTIMATING AND OPTIMIZING TRANSACTION COSTS	13/840,862
ITG Software Solutions, Inc.	MANAGING SECURITY HOLDINGS RISK DURING PORTFOLIO TRADING	13/867,760
ITG Software Solutions, Inc.	Systems, Methods, And Computer Program products For Providing Real Time Analytic Widgets In A Financial Trading System	14/010,394
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR GENERATING LIQUIDITY	14/070,808
ITG Software Solutions, Inc.	METHOD FOR AGENCY COST ESTIMATION	14/160,212
ITG Software Solutions, Inc.	ELECTRONIC TRADING SYSTEM AND METHOD THAT PROVIDE REAL-TIME TRADE ANALYTICS	14/286,496

<b>Owner</b>	<b>Title</b>	<b>Registration/ Application No.</b>
ITG Software Solutions, Inc.	SYSTEMS AND METHODS REGARDING TARGETED DISSEMINATION	14/282,833
ITG Software Solutions, Inc.	SYSTEM AND METHOD FOR EXECUTING STRATEGY EQUITY TRADING	14/299,821
ITG Software Solutions, Inc.	SYSTEMS AND METHODS FOR TRADING A TRADE LIST IN FINANCIAL MARKETS	14/334,777
ITG Software Solutions, Inc.	SYSTEMS AND METHODS OF OPTIMAL COMPUTER TRANSACTION EXECUTION	62/722,573
ITG Software Solutions, Inc.	Apparatus and method for trade aggregation of trade allocations and settlements	15707652
ITG Software Solutions, Inc.	Systems and methods for electronic trading	15790539
ITG Software Solutions, Inc.	System and method for allocating electronic trade orders among a plurality of electronic Trade venues	15916974
ITG Software Solutions, Inc.	System and methods for providing anonymous requests for quotes for financial instruments	15732753
ITG Software Solutions, Inc.	Systems, methods and computer program products for adaptive transaction cost estimation	15948430
ITG Software Solutions, Inc.	Fair value model for futures	15970445
ITG Software Solutions, Inc.	Apparatus and method for trade aggregation of trade allocations and settlements	15980380