

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5469197

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>SEQUENCE:</b>	3

**CONVEYING PARTY DATA**

Name	Execution Date
THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	11/26/2018

**RECEIVING PARTY DATA**

<b>Name:</b>	THOMSON REUTERS (GRC) INC.
<b>Street Address:</b>	3 TIMES SQUARE
<b>City:</b>	NEW YORK
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10036

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	16381137

**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.*

**Phone:** 858-720-8900  
**Email:** dmipdocketing@sheppardmullin.com, strader@sheppardmullin.com  
**Correspondent Name:** SHEPPARD MULLIN RICHTER & HAMPTON LLP  
**Address Line 1:** 650 TOWN CENTER DRIVE, 4TH FLOOR  
**Address Line 4:** COSTA MESA, CALIFORNIA 92626

<b>ATTORNEY DOCKET NUMBER:</b>	64NV-291448
<b>NAME OF SUBMITTER:</b>	SUSAN TRADER
<b>SIGNATURE:</b>	/Susan Trader/
<b>DATE SIGNED:</b>	04/11/2019

**Total Attachments: 20**

source=64NV-291448\_3\_Assignment--ThomsonReutersGlobalResourcesUnlimitedCompany\_to\_ThomsonReuters(GRC  
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## ASSIGNMENT OF PATENTS – UNITED STATES

**THIS ASSIGNMENT OF PATENTS – UNITED STATES** (this “Assignment”) dated as of November 26, 2018 (“**Signing Date**”), is entered into by and between Thomson Reuters Global Resources Unlimited Company, an Irish unlimited company, with offices at Neuhofstrasse 1, 6340 Baar, Switzerland (“**Seller**”) and Thomson Reuters (GRC) Inc., a Delaware corporation, with offices at 3 Times Square, New York, NY, United States 10036 (“**Buyer**”). Seller and Buyer are collectively referred to herein as the “Parties.”

WHEREAS, pursuant to that certain Transaction Agreement, dated as of January 30, 2018 (the “**Agreement**”) the Transferors agreed to assign, transfer and convey to Buyer, among other things, all of Seller’s right, title, and interest in and to those patents and patent applications set forth on Schedule A attached hereto (the “**Patents**”).

WHEREAS, in accordance with and subject to the terms of the Agreement, Seller has agreed to execute this Assignment.

NOW, THEREFORE, For the consideration listed on Schedule B attached hereto, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto, intending to be legally bound hereby, agree as follows:

**Section 1. Definitions.** All capitalized terms not otherwise defined in this Assignment, as used in this Assignment, shall have the respective meanings ascribed to such terms in the Agreement.

**Section 2. Assignment.** The Parties hereby intend, agree and confirm that, effective as of October 1, 2018 (the “**Effective Date**”), Seller assigned, transferred and conveyed to Buyer, and Buyer accepted, all of Seller’s right, title, and interest in, to, and under (including all worldwide rights of priority based upon and the right to transfer ownership of (including legal title, economic and beneficial ownership of)) the Patents, together with all issued patents that are or may be secured from any applications included in the Patents, now or hereafter in effect, for Buyer’s own use and enjoyment, and for the use and enjoyment of Buyer’s successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by the Seller if this assignment had not been made; together with all past, current or future Claims, judgments, rights of recovery, rights of setoff or reimbursement and defenses of any nature available to or being pursued by Seller against third parties (and the right to receive all monies, proceeds, settlements and recoveries in connection therewith) to the extent related to the Patents. If and to the extent the above assignment cannot be deemed effective on the Effective Date under applicable law, then Seller, effective as of the Signing Date, hereby assigns, transfers and conveys all of the foregoing to Buyer, and Buyer, as of the Signing Date, hereby accepts the foregoing.

**Section 3. Recording the Assignment.** The Parties hereby authorize the relevant authority at the United States Patent and Trademark Office to record this Assignment and

record Buyer as the owner of the Patents and to issue any and all Patents to Buyer, as assignee of Seller's entire right, title and interest in, to, and under the same.

**Section 4. Agreement Governs.** Nothing contained herein shall in any way amend, modify, supersede or cancel the terms, covenants, representations, warranties or conditions of the Agreement.

**Section 5. Counterparts.** This Assignment may be executed in one or more counterparts, all of which shall be considered one and the same agreement, and shall become effective when each party hereto shall have received counterparts hereof signed by each of the other parties hereto. If any signature is delivered by PDF, such signature shall create a valid and binding obligation of the party executing (or on whose behalf the signature is executed) with the same force and effect as if such PDF signature were an original hereof.

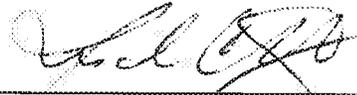
**Section 6. Governing Law.** This Assignment and its enforcement, and any controversy arising out of or relating to the making or performance of this Assignment shall be governed by and construed in accordance with the law of the State of New York, without regard to New York's principles of conflicts of law. Any disputes arising out of this instrument shall be subject to the provisions of Sections 11.10(A), 11.11 and 11.12 of the Agreement, *mutatis mutandis*.

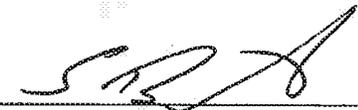
**Section 7. Further Assurances.** Seller shall provide Buyer and its successors and assigns reasonable cooperation and assistance at Buyer's request and expense (including the execution and delivery of any and all country specific forms of assignment, affidavits, declarations, oaths, exhibits, powers of attorney or other documentation) as are reasonably requested by Buyer to effect, record, register or maintain this Assignment and/or the rights assigned herein.

[Signature page follows.]

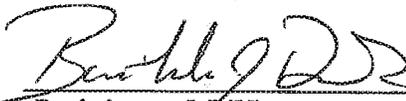
IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Assignment as of the date first written above.

**Thomson Reuters Global Resources Unlimited Company**

By:   
Name: Priscilla Hughes  
Title: Priscilla Hughes  
Director

By:   
Name: Stewart Beaumont  
Title: Stewart Beaumont  
Managing Director, TRGR

**Thomson Reuters (GRC) Inc.**

By:   
Name: Bartholomew J. DiVita  
Title: Assistant Secretary

**SCHEDULE A**

**Patents**

<b>Title</b>	<b>Patent Number</b>	<b>Country</b>	<b>Owner</b>
Method and System for Effecting Straight-through-Processing of Trades of Various Financial Instruments	7,433,842	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System for Effecting Straight-through-Processing of Trades of Various Financial Instruments	7,734,518	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
APPARATUS AND METHODS FOR HANDLING TRADING DATA	7,433,837	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
APPARATUS AND METHODS FOR HANDLING TRADING DATA	7,653,579	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
APPARATUS AND METHODS FOR HANDLING TRADING DATA	8,001,027	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
APPARATUS AND METHODS FOR HANDLING TRADING DATA	8,301,531	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEMS AND METHODS FOR INTERACTIVELY DISAMBIGUATING ENTITIES	9,646,343	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
CUSTOMIZABLE WEB-BASED TRAINING SYSTEM	6,498,920	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Content Distribution Management System	9,444,904	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SHORT STRING COMPRESSION	9,235,610	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
BILATERAL CHAT FOR INSTANT MESSAGING	9,712,333	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE LINKED DEBT INSTRUMENTS	9,466,084	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
ELECTRONIC MARKET CALENDAR FOR DISPLAYING STANDARD SETTLEMENT DATES, FUTURE MARKET-RELATED EVENTS AND HOLIDAYS PERTAINING TO A FINANCIAL TRANSACTION	7,376,605	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
INTERNAL TRADE REQUIREMENT ORDER MANAGEMENT AND EXECUTION SYSTEM	7,761,363	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
PROTOCOL-INDEPENDENT ASSET TRADING SYSTEM AND METHODS	7,536,343	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DYNAMIC ACCOUNT MAPPING SYSTEM FOR COMPUTERIZED ASSET TRADING	7,634,438	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND APPARATUS FOR TRADING ASSETS	8,160,950	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
CREDIT DATA PROCESSING SYSTEM FOR CONTROLLING ELECTRONIC TRADING BASED ON CREDIT ARRANGEMENTS	7,991,683	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
ASYMMETRIC DICTIONARY BASED COMPRESSION/DECOMPRESSION USEFUL FOR BROADCAST OR MULTICAST UNIDIRECTIONAL COMMUNICATION CHANNELS	8,400,334	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND SYSTEMS FOR TEXT DISAMBIGUATION AND RELEVANCE SCORING	8,321,398	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Methods for Interactive Disambiguation of Data	8,949,241	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Information Processing and Transmissions Systems	9,202,238	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
AUTOMATIC DATA CLEANING FOR MACHINE LEARNING CLASSIFIERS	8,626,682	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

				COMPANY
ASSOCIATION SIGNIFICANCE	9,495,635	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
ENTITY FINGERPRINTS	9,292,545	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
System and Method for Improved Rating and Modeling of Asset Backed Securities	8,452,681	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Credit Risk Mining	8,671,040	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Bootstrapper and Software Download Manager	8,938,735	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Entitled Data Cache Management	8,397,066	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Entitled Data Cache Management	9,043,881	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Term-level text with mining with taxonomies	6,442,545	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Determining trends using text mining	6,532,469	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Displaying Time-Series Data and Correlated Events Derived from Text Mining	7,570,262	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Displaying Time-Series Data and Correlated Events Derived from Text Mining	7,907,140	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Business Process Automation	8,332,864	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	
Method, Apparatus and Program for Delivery and Display of Information From Dynamic and Statis Data Sources	6,647,410	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	

[Schedule to Assignment of Patents - United States]

PATENT

REEL: 048856 FRAME: 0818

Systems and Methods for Rapid Delivery of Tiered Metadata	8,843,522	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Systems and Methods for Rapid Delivery of Tiered Metadata	9,244,963	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Systems and Methods for the Identification and Messaging of Trading Parties	8,639,605	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DISPLAY METHOD FOR TIME-ORDERED DYNAMIC LISTS OF DATA	6,462,758	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Market Data and Enterprise System Implemented by a Master Entitlement Processor	6,535,917	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Market Data and Enterprise System Implemented by a Master Entitlement Processor	8,195,780	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND SYSTEM FOR LAYOUT OF OBJECTS WITHIN A PERIMETER USING CONSTRAINED INTERACTIVE SEARCH	6,380,954	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD OF CONTROLLING SOFTWARE APPLICATIONS SPECIFIC TO A GROUP OF USERS	6,513,111	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM AND METHOD FOR UNIFIED DATA ACCESS OF FINANCIAL DATA	6,606,637	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Method of Accelerating Delivery of Dynamic Web Pages over a Network	7,376,653	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Time Monitor	8,345,561	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Time Monitor	9,053,106	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Time Monitor	9,229,832	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Messaging Model and Architecture	8,234,391	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Messaging Model and Architecture	9,607,303	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

				COMPANY
Metadata Database Management System and Method Therefor		7,613,728	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System of Managing Credit for the Electronic Trading of Financial Instruments		7,110,972	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System of Managing Mutual Early Termination Terms for the Electronic Trading of Financial Instruments		7,266,521	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method And System For Multi-Period Performance Attribution		7,249,079	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method And System For Multi-Period Performance Attribution		7,246,091	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method And System For Multi-Period Performance Attribution With Metric-Preserving Coefficients		7,249,082	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Apparatus, Method And System For A Securities Tracking Management System		7,546,259	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Readership information delivery system for electronically distributed investment research		6,651,056	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Distributed Commerce System		7,330,830	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Distributed Commerce System		8,359,251	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Distributed Commerce System		8,700,506	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Electronic Commerce Infrastructure System		7,287,089	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Electronic Commerce Infrastructure System		8,010,412	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Electronic Sales System		7,305,360	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents – United States]

PATENT

REEL: 048856 FRAME: 0820

Electronic Sales System	8,600,852	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Electronic Commerce System	9,213,988	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System, Method and Computer Readable Medium Containing Instructions for Evaluating and Disseminating Investor Performance Information	7,016,872	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System, method and computer readable medium containing instructions for evaluating and disseminating securities analyst performance information	7,546,263	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System, Method and Computer Readable Medium Containing Instructions for Evaluating and Disseminating Investor Performance Information	7,788,165	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System, Method and Computer Readable Medium Containing Instructions for Evaluating and Disseminating Investor Performance Information	7,788,156	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
MANAGEMENT METHOD AND SYSTEM FOR A USER	8,775,214	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Real-Time Financial Search Engine and Method	6,850,906	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Method for Data Compression using Compression Hardware	7,987,161	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Method for Data Compression using Compression Hardware	8,538,936	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
A METHOD AND SYSTEM FOR PROVIDING DATA TO A USER BASED ON USER'S INQUIRY	6,351,747	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM AND METHOD FOR GENERATION OF TEXT REPORTS	6,651,219	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

PATENT

REEL: 048856 FRAME: 0821

Method and System for Referencing, Archiving and Retrieving Symbolically Linked Information	7,398,262	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
A METHOD AND SYSTEM FOR SYMBOLIC LINKAGE AND INTELLIGENT CATEGORIZATION OF INFORMATION	6,665,679	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND SYSTEM FOR STORING AND RETRIEVING DOCUMENTS	6,912,529	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
MAINTAINING AND RECONSTRUCTING THE HISTORY OF DATABASE CONTENT MODIFIED BY A SERIES OF EVENTS	6,959,301	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DYNAMIC DISPLAY USING PUSHED STREAMED DATA	8,108,527	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DYNAMIC DISPLAY USING PUSHED STREAMED DATA	8,806,034	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DYNAMIC DISPLAY USING PUSHED STREAMED DATA	9,112,829	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DATA CONTEXT PASSING BETWEEN NON-INTERFACING APPLICATION PROGRAMS IN A COMMON FRAMEWORK	9,047,234	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
AUTOMATIC FORMATTING OF DISPLAY SCREEN TO REFLECT PAST CORRELATIVE CHANGES TO DISPLAY DATA WINDOWS	8,112,717	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
AUTOMATIC FORMATTING OF DISPLAY SCREEN TO REFLECT PAST CORRELATIVE CHANGES TO DATA DISPLAY WINDOWS	9,052,928	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SINGLE SIGN-ON METHOD IN MULTI-APPLICATION FRAMEWORK	8,996,857	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SINGLE SIGN-ON METHOD IN MULTI-APPLICATION FRAMEWORK	9,432,355	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

Method and System For Generating A Valuation Metric Based on Growth Data Factors	8,645,253	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Command Script Parsing Using Local and Extended Storage for Command Lookup	7,519,962	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System for Providing Guidance Data	8,666,800	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Financial Disclosure Content Synchronizing Software	7,966,554	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
A Method and System for Click-Thru Capacity in Electronic Media	9,195,661	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Computing Algebraic Equations	7,769,783	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Methods and systems for categorizing and indexing human-readable data	8,495,073	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method for Certifying and Verifying Digital Web Content Using Public Cryptography	8,352,379	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Common Component Framework	7,805,730	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Common Component Framework	8,578,395	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
NEGOTIATED MATCHING SYSTEM	7,505,915	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System for Multi-leg Trading	8,386,364	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and Apparatus for Option Filtering	7,899,726	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System for Requesting Prices for Electronic Trading of Financial Instruments	7,840,474	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
IOI-BASED BLOCK TRADING SYSTEMS, METHODS, INTERFACES, AND SOFTWARE	8,046,290	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

IOI-BASED BLOCK TRADING SYSTEMS, METHODS, INTERFACES, AND SOFTWARE	8,386,373	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System for Identifying High Probability Trade Matches	8,577,780	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND SYSTEM FOR IDENTIFYING HIGH PROBABILITY TRADE MATCHES	8,732,063	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Asynchronous Hypertext Messaging System and Method	7,376,715	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Asynchronous Hypertext Messaging System and Method	6,754,621	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Asynchronous Hypertext Messaging System and Method	7,734,791	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Corporate Board Management System	9,235,862	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Zoom Interface Component for Integrated Rating System	8,977,615	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Investor Relations Event Scheduling System and Method	6,567,807	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Investor Relations Event Scheduling System and Method	6,574,630	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Private Company Valuation	8,468,081	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Computer-Based Rating System and Method Having Mid-Quartile Filter	8,560,377	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
CO2 Estimator Module	8,321,234	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
CO2 Estimator Module	9,613,331	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
CO2 Estimator Module	8,645,151	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

PATENT

REEL: 048856 FRAME: 0824

System and Method for Integrated Delivery of Media and Synchronized Transcription	6,513,003	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
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Patent Applications

Title	Application Number	Country	Owner
METHOD AND SYSTEM FOR MONITORING AN ISSUE	11/245,240	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Subscription apparatus and method	11/517,336	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM FOR NATURAL LANGUAGE INTERACTION WITH FINANCIAL DATA	15/429,483	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEMS AND METHODS FOR PROVIDING FINANCIAL DATA TO FINANCIAL INSTRUMENTS IN A DISTRIBUTED LEDGER SYSTEM	15/473,127	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Self-Service Classification System	15/478,772	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEMS AND METHODS FOR PROVIDING IDENTITY SCORES	15/432,407	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEMS AND METHODS FOR PROVIDING A PERSONAL DISTRIBUTED LEDGER	15/612,288	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

SYSTEM AND METHODS FOR PROVIDING IDENTITY ASSURANCE FOR DECENTRALIZED APPLICATIONS	15/696,996	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEMS AND METHODS FOR INTERCEPTION OF SMART CONTRACTS	15/707,571	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
APPARATUSES, METHODS AND SYSTEMS FOR RELEVANCE SCORING IN A GRAPH DATABASE USING MULTIPLE PATHWAYS	15/660,301	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
RISK IDENTIFICATION ENGINE AND SUPPLY CHAIN GRAPH GENERATOR	15/833,956	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Combinatorial Business Intelligence	14/918,128	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Low-Cost, Realistic, Performance Test Bed for an Electronic Trading Venue	15/897,226	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DIGITAL COMMUNICATIONS INTERFACE AND GRAPHICAL USER INTERFACE	14/926,591	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
ELEKTRON PULSE METHODS, APPARATUSES AND MEDIA	14/727,055	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
RISK IDENTIFICATION AND RISK REGISTER GENERATION SYSTEM AND ENGINE	15/181,194	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
APPARATUSES, METHODS AND SYSTEMS FOR PERSISTING VALUES IN A COMPUTING ENVIRONMENT.	15/683,330	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

[Schedule to Assignment of Patents - United States]

PATENT

REEL: 048856 FRAME: 0826

APPARATUSES, METHODS AND SYSTEMS FOR ADJUSTING TAGGING IN A COMPUTING ENVIRONMENT	15/844,834	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND SYSTEM FOR GENERATING AND USING A MASTER ENTITY ASSOCIATIVE DATA NETWORK	14/193,977	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Methods and Systems for Managing Supply Chain Processes and Intelligence	15/207,464	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
TRAILBLAZER METHODS, APPARATUSES AND MEDIA	14/170,191	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
DYNAMIC FUNCTION BUILDER	14/060,798	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM AND METHOD FOR AUTOMATED COMPLIANCE VERIFICATION	13/422,949	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM AND METHOD FOR VERIFIED COMPLIANCE IMPLEMENTATION	13/422,955	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Workflow Software Structured around Taxonomic Themes of Regulatory Activity	14/206,648	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System And Method For Evaluating Regulatory Compliance For A Company	12/111,465	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Price Target Builder	13/566,605	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Machine Generated Financial Summary	14/189,287	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

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ENVIRONMENTAL, SOCIAL AND CORPORATE GOVERNANCE LINKED DEBT INSTRUMENTS	15/285,526	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Methods and Systems for Identity Creation, Verification and Management	15/283,993	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
M/S For Redacting and Presenting Documents	12/590,895	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
ASSOCIATION SIGNIFICANCE	15/351,256	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
MACHINE LEARNING-BASED RELATIONSHIP ASSOCIATION AND RELATED DISCOVERY AND SEARCH ENGINES	15/609,800	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
ENTITY FINGERPRINTS	15/077,713	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Method for Improved Rating and Modeling of Asset Backed Securities	13/902,900	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHODS AND SYSTEMS FOR GENERATING COMPOSITE INDEX USING SOCIAL MEDIA SOURCED DATA AND SENTIMENT	13/337,662	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHODS AND SYSTEMS FOR GENERATING CORPORATE GREEN SCORE USING SOCIAL MEDIA SOURCED DATA AND	13/337,703	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Method for Graphical Display of Multivariate Data	11/071,978	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

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SYSTEM AND METHOD FOR ESTIMATING RATING CRITERIA VALUES	15/452,511		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
PREDICTIVE INITIAL PUBLIC OFFERING ANALYTICS	13/327,972		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHOD AND APPARATUS FOR RISK MINING	12/628,426		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHODS AND SYSTEMS FOR RISK MINING AND FOR GENERATING ENTITY RISK PROFILES	13/423,127		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
METHODS AND SYSTEMS FOR RISK MINING AND FOR GENERATING ENTITY RISK PROFILES AND FOR PREDICTING BEHAVIOR OF	13/423,134		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Methods and Systems for Predicting Market Behavior Based on News and Sentiment Analysis	13/308,496		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Methods and Systems for Generating Supply Chain Representations	13/795,022		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEMS, METHODS, AND SOFTWARE FOR MANAGING AND COMMUNICATING FINANCIAL DATA	11/272,459		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Encoded Short Message Service Text Messaging Systems and Methods	11/408,804		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Systems and Methods for the Identification and Messaging of Trading Parties	14/136,635		United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

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FINANCIAL INFORMATION SYSTEMS, METHODS, INTERFACES, AND SOFTWARE	10/768,598	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Financial-Information Systems, Methods, Interfaces, and Software	11/239,663	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Electronic Commerce System	14/089,081	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Formulation of Optimized Investment Indexes	11/776,110	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method and System For Generating A Valuation Metric Based on Growth Data Factors	14/172,379	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
A Method and System for Click-Thru Capacity in Electronic Media	14/884,953	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method, System And Machine Readable Program For Mitigating Effects Of Spikes In Financial Data	11/937,737	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Integrated, Context Passing User Display	14/089,198	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Fund of Funds Analysis Tools	12/765,365	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Method for Certifying and Verifying Digital Web Content Using Public Cryptography	13/688,817	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Financial Market Trading System	10/477,932	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Methods and System for Identifying High Probability Trade Matches	14/264,847	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
WEATHER FORECAST SYSTEM AND METHOD	12/348,152	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

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Storm Commodity Forecast System and Method	12/501,036	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Methods for Detecting and Locating Unsecured Sensors in a Network	15/921,243	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System & Methods for Identity Atomization and Usage	16/007,581	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
System and Methods for Ranking Entities	16/019,157	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Systems Methods and Machine Readable Programs for Value Chain Analytics	15/944,904	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Digital Identity Deconstruction and Reconstruction	15/922,505	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Delay-Free Matching Algorithm for Deemphasizing Effects of Speed Differentials among Price Makers	62/648,459	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Automated Content Ingestion Tool	62/642,283	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
Deep Learning Approach for Accessing Corporate Credit Risk	62/655,974	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM AND METHOD FOR DETERMINING AND UTILIZING SUCCESSFUL OBSERVED PERFORMANCE	13/836,520	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY
SYSTEM AND METHOD FOR FORMING PREDICTIONS USING EVENT-BASED SENTIMENT ANALYSIS	13/967,301	United States	THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY

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Schedule B

The total value of [REDACTED] which is the value of the Patents combined with the value of intellectual property being assigned by Seller to Buyer pursuant to that certain Assignment of Unregistered Intellectual Property -- United States, dated October 1, 2018.

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