

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT6575225

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
THOMSON REUTERS GLOBAL RESOURCES UNLIMITED COMPANY	11/26/2018
<b>RECEIVING PARTY DATA</b>	
<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
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16562763
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	6126046697
<b>Email:</b>	bpollack@winthrop.com
<b>Correspondent Name:</b>	BRIAN POLLACK
<b>Address Line 1:</b>	WINTHROP & WEINSTINE, P.A.
<b>Address Line 2:</b>	225 SOUTH SIXTH STREET, SUITE 3500
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402
<b>ATTORNEY DOCKET NUMBER:</b>	23002.3- ASG 4
<b>NAME OF SUBMITTER:</b>	BRIAN R. POLLACK
<b>SIGNATURE:</b>	/BRIAN R. POLLACK/
<b>DATE SIGNED:</b>	02/27/2021
<b>Total Attachments: 20</b>	
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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*.

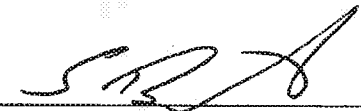
**Section 7. Further Assurances.** Seller shall provide Buyer and its successors and assigns reasonable cooperation and assistance at Buyer's request and expense (including the execution and delivery of any and all country specific forms of assignment, affidavits, declarations, oaths, exhibits, powers 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.]

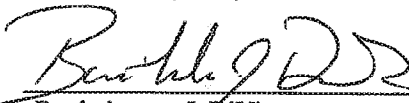
IN WITNESS WHEREOF, the Parties hereto have duly executed and delivered this Assignment as of the date first written above.

**Thomson Reuters Global Resources Unlimited Company**

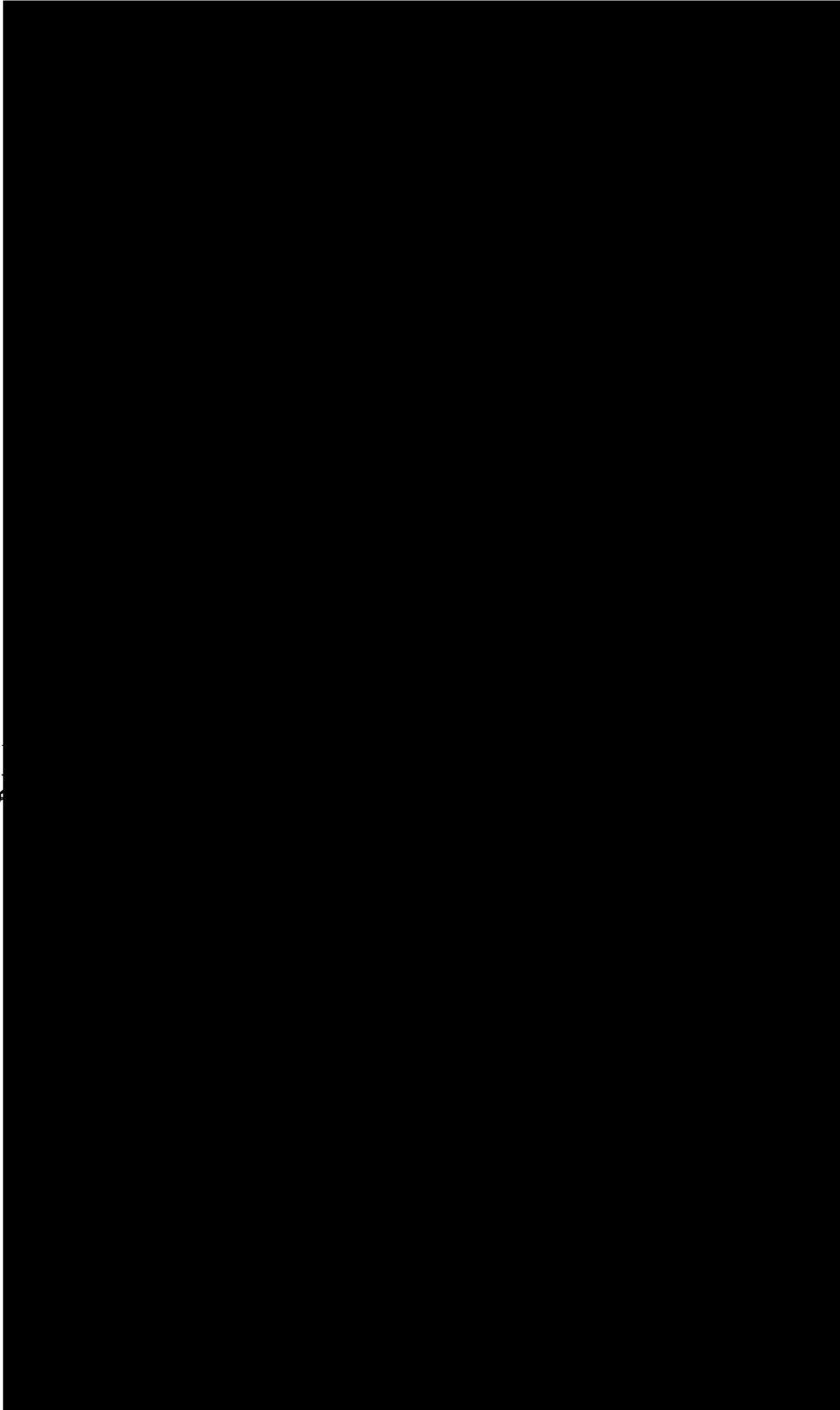
By:   
Name: Priscilla Hughes  
Title: Priscilla Hughes  
Director

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

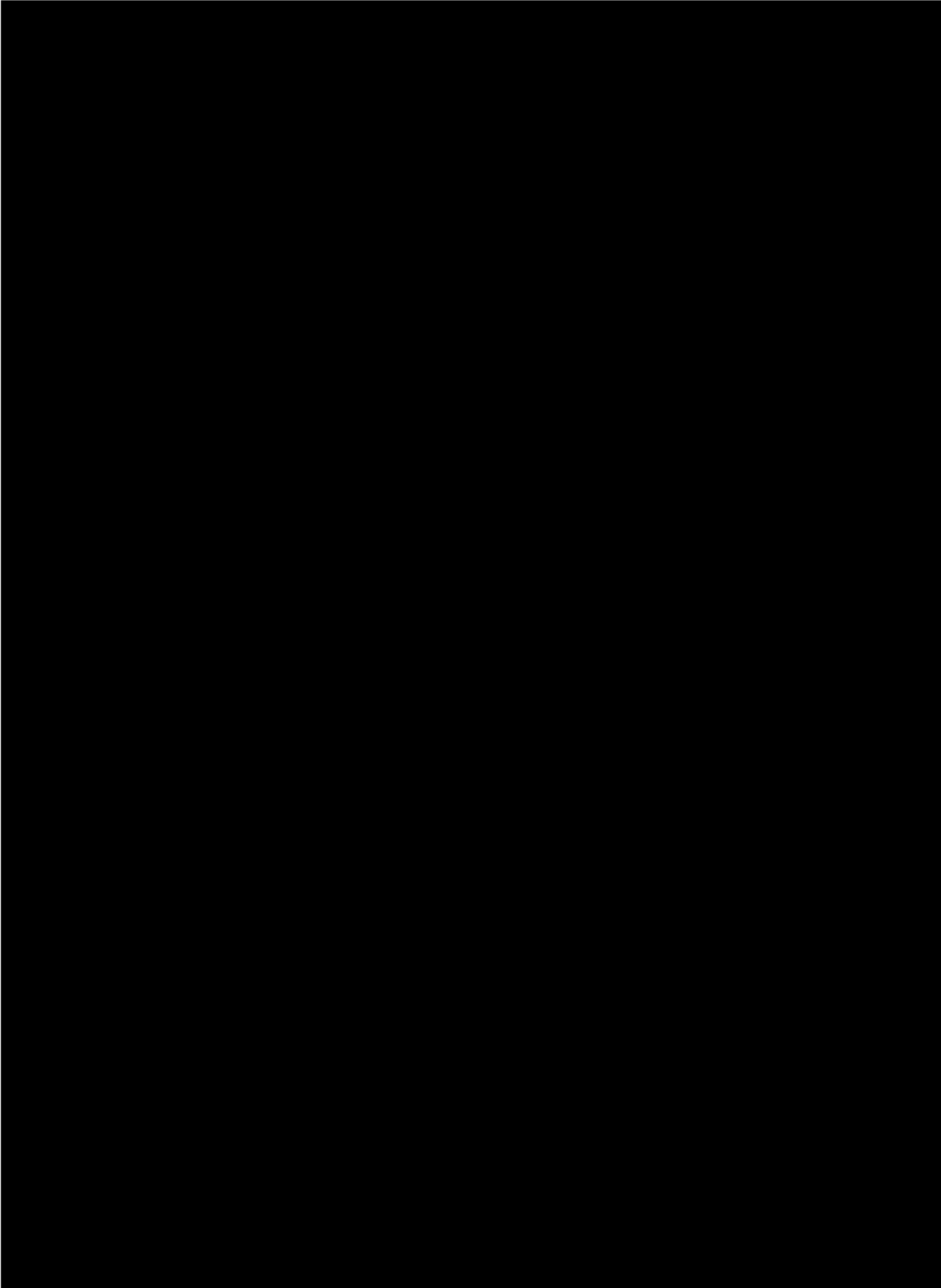
**Thomson Reuters (GRC) Inc.**

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

SCHEDULE A



*[Schedule to Assignment of Patents – United States]*



*[Schedule to Assignment of Patents – United States]*

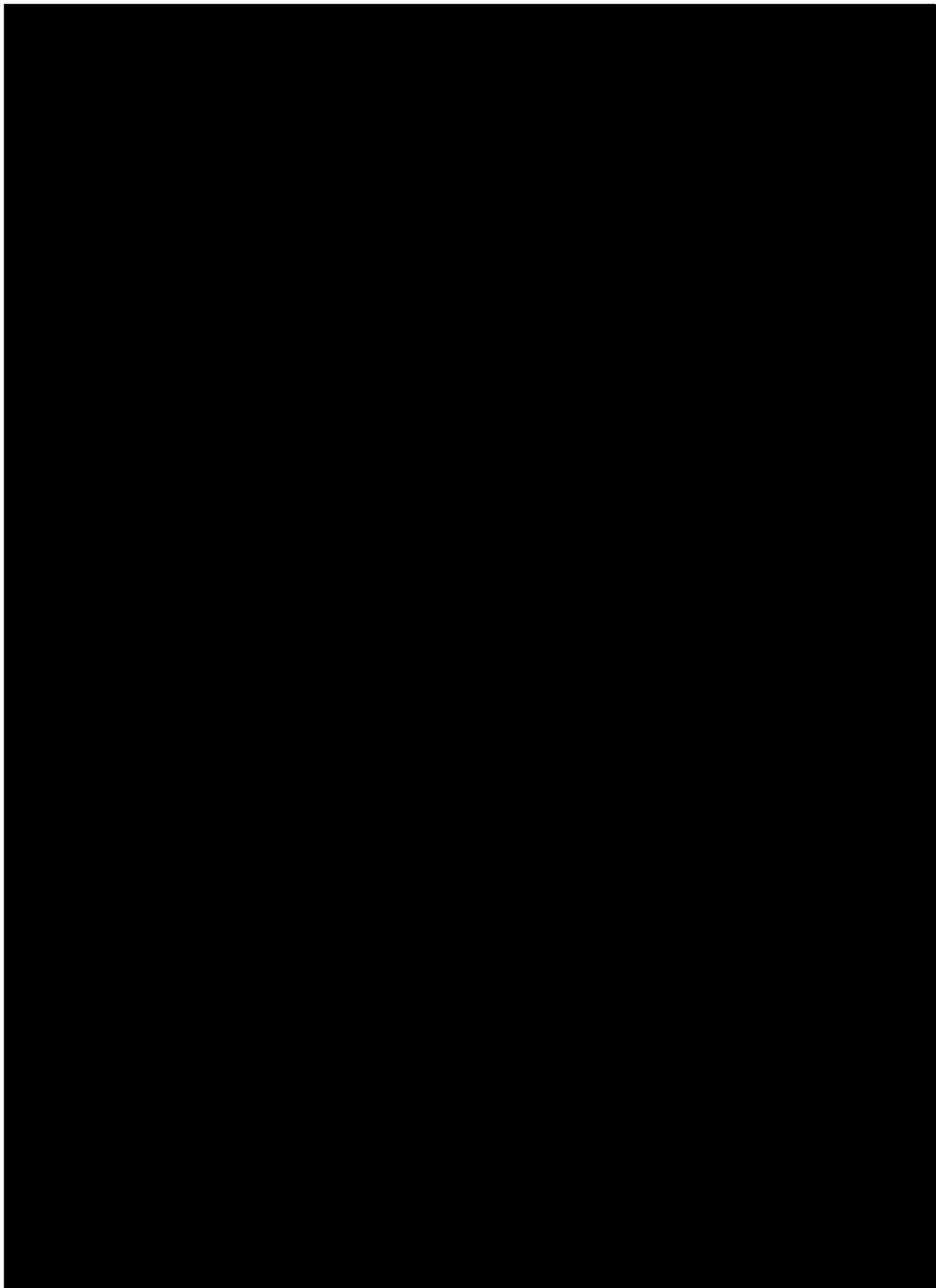
*[Schedule to Assignment of Patents - United States]*



[Schedule to Assignment of Patents - United States]

PATENT

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*[Schedule to Assignment of Patents – United States]*

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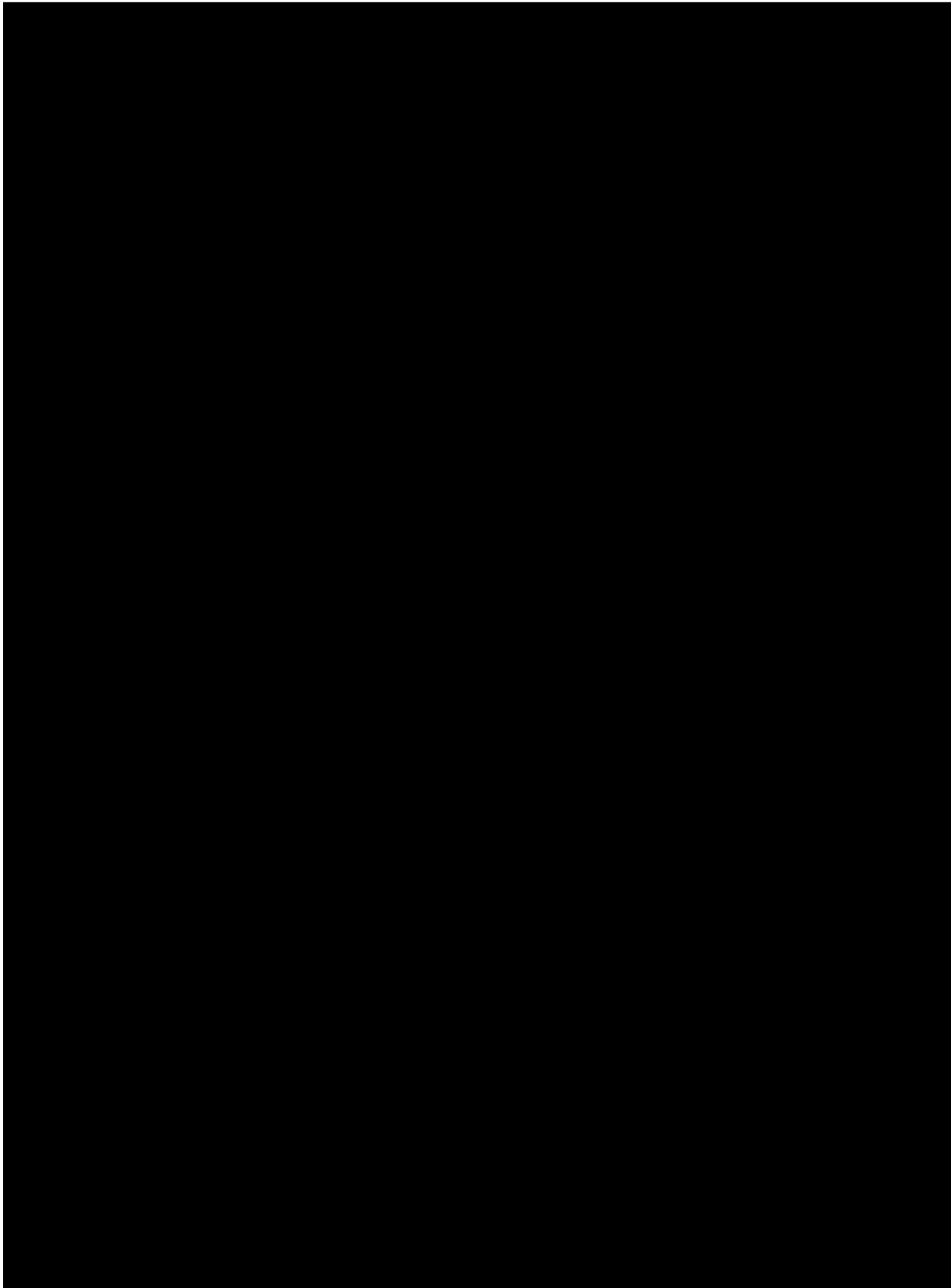
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*[Schedule to Assignment of Patents - United States]*

PATENT

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*[Schedule to Assignment of Patents -- United States]*

*[Schedule to Assignment of Patents - United States]*

**PATENT**

**REEL: 055438 FRAME: 0421**

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: 055438 FRAME: 0423



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

[Schedule to Assignment of Patents - United States]

PATENT

REEL: 055438 FRAME: 0424

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

[Schedule to Assignment of Patents – United States]

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

[Schedule to Assignment of Patents - United States]

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

[Schedule to Assignment of Patents - United States]

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

[Schedule to Assignment of Patents - United States]

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.

[Schedule to Assignment of Patents -- United States]