505245642 12/19/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT5292421

Stylesheet Version v1.2

SUBMISSION TYPE:NEW ASSIGNMENTNATURE OF CONVEYANCE:ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SCOTT F. SINGER	09/29/2014

RECEIVING PARTY DATA

Name:	TRADING TECHNOLOGIES INTERNATIONAL, INC.
Street Address:	222 SOUTH RIVERSIDE PLAZA
Internal Address:	SUITE 1100
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60606

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16226032

CORRESPONDENCE DATA

Fax Number: (312)476-1001

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: 312-476-1118

Email: patentreporting@tradingtechnologies.com

Correspondent Name: TRADING TECHNOLOGIES INTERNATIONAL, INC.

Address Line 1: 222 SOUTH RIVERSIDE PLAZA

Address Line 2: SUITE 1100

Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	131025US03
NAME OF SUBMITTER:	JOSEPH W. FLERLAGE
SIGNATURE:	/Joseph W. Flerlage/
DATE SIGNED:	12/19/2018

Total Attachments: 2

source=131025US03 Assignment#page1.tif source=131025US03 Assignment#page2.tif

PATENT 505245642 REEL: 047820 FRAME: 0173

Assignment Attorney Docket No.: 131025US01 Page 1 of 2

ASSIGNMENT AND AGREEMENT IN AN APPLICATION FOR LETTERS PATENT OF THE UNITED STATES OF AMERICA

As the below named inventor, I hereby declare that:

I believe that I am the original inventor or an original and joint inventor of the inventions described in an application for Letters Patent of the United States of America:

Title: Methods and Systems for Managing Resources on a Mobile Trading Device Attorney Docket No.: 131025US01

For valuable consideration received, I hereby sell, assign, and transfer to Trading Technologies International, Inc., a corporation of the State of Delaware, headquartered at 222 South Riverside Plaza, Suite 1100, Chicago, Illinois 60606 (hereinafter "TT"), as well as its successors and assigns, my entire right, title, and interest, for all countries in and to said inventions and all the rights and privileges under any and all Letters Patent that may be granted therefore, and any divisions, continuations, reissues, and extensions thereof.

I agree that, when requested, I will, without charge to TT but at its expense, sign all papers, take all rightful oaths, make all rightful declarations, and do all acts which may be necessary, desirable, or convenient for securing and maintaining patents or other forms of protection for said inventions in any and all countries and for vesting title thereto in TT, its successors, assigns or nominees.

I agree that I will communicate to TT or its representatives any facts known to me respecting said inventions and when requested by TT and at its expense will testify in any legal proceedings, and generally do everything possible to aid TT, its successors, assigns, and legal representatives or nominees, to obtain or enforce proper protection for said inventions in any and all countries.

I authorize and empower TT, its successors, assigns, or nominees, to make application for patent or other form of protection for said inventions in its or their own name, or in my/our name, in any and all countries, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

I hereby consent that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of TT or its successors, assigns, or nominees to apply for patent or other proper protection for said inventions, and to claim the aforesaid benefits of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with TT, its successors, assigns, legal representatives, and nominees, that, to the best of my knowledge, the right, title, and interest herein conveyed by me are free and clear of any encumbrance, and that I have the full right to convey the same as herein expressed.

This Agreement and Assignment supersedes all other assignments, agreements, and addendums related to the above-identified application.

PATENT REEL: 047820 FRAME: 0174

Assignment Attorney Docket No.: 131025US01 Page 2 of 2

WITNESS my hand and seal this 29th day of September, 2014.
SCATE F. SINGER
NOTARY:
State of Illinois
County of Cook
The foregoing instrument was acknowledged before me this Aday of September, 2014 by
Scott F. SINGER. Scott F. SINGER. MOTARY PUBLIC
OR UTNESS: OR UNITNESS: "OFFICIAL SEAL" JILL PATRICIA FITZPATRICK NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 12/12/2016
WITNESS 1:
I,, do hereby witness and attest that [First Middle LAST]
executed this Assignment document in my presence of his own free and voluntary will on this day for the uses and purposes set forth herein.
Signature: Date:
WITNESS 2:
I,, do hereby witness and attest that [First Middle LAST]
executed this Assignment document in my presence of his own free and voluntary will on this day for the uses and purposes set forth herein.
Signature: Date:

PATENT REEL: 047820 FRAME: 0175

RECORDED: 12/19/2018