PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3159401

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PATRICK JOSEPH ROONEY	12/19/2014
WILLIAM TIGARD BAKER	12/19/2014
THOMAS JEFFREY WEISS	12/18/2014
BRIAN J. BUCK	12/18/2014

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14579883

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: 312-913-0001

Email: patentreporting@tradingtechnologies.com

Correspondent Name: MBHB/TRADING TECHNOLOGIES

300 SOUTH WACKER DRIVE Address Line 1:

Address Line 2: **SUITE 3200**

Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	131031US01	
NAME OF SUBMITTER:	MATTHEW T. RIDSDALE	
SIGNATURE:	/Matthew T. Ridsdale/	
DATE SIGNED:	12/22/2014	

Total Attachments: 8

source=131031US01 Assignments 22Dec2014#page1.tif

source=131031US01_Assignments_22Dec2014#page2.tif
source=131031US01_Assignments_22Dec2014#page3.tif
source=131031US01_Assignments_22Dec2014#page4.tif
source=131031US01_Assignments_22Dec2014#page5.tif
source=131031US01_Assignments_22Dec2014#page6.tif
source=131031US01_Assignments_22Dec2014#page7.tif
source=131031US01_Assignments_22Dec2014#page8.tif

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 Apparatus to Calculate and Present Transaction Adjusted Values Attorney Docket No.: 131031

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.

Assignment Atturney Ducket No.; 131031US01 Page 2 of 2

WITNESS my hand and seal this	
NOTARY:	
State of Illinois	
County of Cook	
The foregoing instrument was acknowledged before me this 19 day of Decimber, 2014 by	
Patrick Joseph ROONEY. Patrick Joseph ROONEY. SOTARY PUBLIC	
OR OFFICIAL SEAL" OR JILL PATRICIA FITZPATRICK NOTARY PUBLIC, STATE OF ILLINOIS WY COMMISSION EXPIRES 12/12/2016 WITNESS:	
WITNESS 1:	
I,, do hereby witness and aftest 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;	

As the below named inventor, Thereby 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 Apparatus to Calculate and Present Transaction Adjusted Values Attorney Docket No.: 131031

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.

Assignment Attorney Backet No.: 131031U901 Page 2 of 2

WITNESS my hand and seal this 19th day of Planber, 2014.
William Tigard BAKER
NOTARY:
State of Illinois
County of Cook
The foregoing instrument was acknowledged before me this <u>19</u> day of <u>bleomkee</u> , 2014 by
William Tigard BAKER. Out The Street North Public
OFFICIAL SEAL" JILL PATRICIA FITZPATRICK OR NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 12/12/2018 WITNESS:
YYAAINESSO;
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]
[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;

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 Apparatus to Calculate and Present Transaction Adjusted Values Attorney Docket No.: 131031

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 "Tf"), 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 eaths, 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.

Assignment Attorney Docket No.: 131031US01 Page 2 of 2

WITNESS my hand and seal this 18 day of December 2014.
Manual John Victorian States WEISS
NOTARY:
State of Illinois
County of Cook
The foregoing instrument was acknowledged before me this // day of Delinous, 2014 by
Thomas Jeffrey WEISS. NOTARY PUBLIC
OFFICIAL SEAL" JILL PATRICIA FITZPATRICK OR NOTARY PUBLIC, STATE OF ILLINOIS \$ MY COMMISSION EXPIRES 12/12/2016 \$
WITNESS:
WITNESS 1:
I,, do hereby witness and attest that
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:
t,, 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:

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 Apparatus to Calculate and Present Transaction Adjusted Values Attorney Docket No.: 131031US01

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.

Assignment Attorney Docket No.: 1310311/S01 Page 2 of 2

WITNESS my hand and seal this
Lange Jane
Brian J. BUCK
NOTARY:
State of Illinois
County of Cook
The foregoing instrument was acknowledged before me thisday of, 2014 by
Brian J. BUCK.
NOTARY PUBLIC
An an
OR
WITNESS:
WITNESS 1:
I, <u>Christapher Puck</u> , do hereby witness and attest that <u>Brian J. BUCK</u>
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
WITNESS 2:
I, <u>(ATHERNIE BUCK</u> , do hereby witness and attest that <u>Brian J. BUCK</u>
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: 42/18/2014

RECORDED: 12/22/2014