503080550 12/01/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3127154

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the TYPOGRAPHICAL ERROR IN THE NAME OF THE ASSIGNEE NEW YORK STOCK EXCHANGE, INC. previously recorded on Reel 017044 Frame 0881. Assignor(s) hereby confirms the ASSIGNEE'S NAME IS NEW YORK STOCK EXCHANGE, INC.

CONVEYING PARTY DATA

Name	Execution Date
ROGER BURKHARDT	09/27/2005
ANNE ALLEN	09/23/2005
ROBERT MCSWEENEY	09/26/2005
LOUIS G. PASTINA	09/23/2005

RECEIVING PARTY DATA

Name:	NEW YORK STOCK EXCHANGE, INC.
Street Address:	11 WALL STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10005

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	8024247

CORRESPONDENCE DATA

Fax Number: (215)656-2498

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: 215-656-3385

Email: pto.phil@dlapiper.com

Correspondent Name: PAUL A. TAUFER, DLA PIPER LLP (US)
Address Line 1: 1650 MARKET STREET, SUITE 4900
Address Line 4: PHILADELPHIA, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER: NSE-14-1131R5

NAME OF SUBMITTER: NANCY NUNEZ

SIGNATURE: /NN/

DATE SIGNED: 12/01/2014

Total Attachments: 6

PATENT

503080550 REEL: 034501 FRAME: 0175



PATENT REEL: 034501 FRAME: 0176

9/30/5 RE	J.S. DEPARTMENT OF 0 ited States Patent and T
To the Director of the U.S. Patent and Trademark Office: P	lease record the attached documents or the new address
Name of conveying party(ies)	2. Name and address of receiving party(
Burkhardt, Roger Allen, Anne	Name: New York Stock Exchange
McSweeney, Robert	Internal Address:
Pastina, Louis G.	
Additional name(s) of conveying party(ies) attached? Yes ✓ 3. Nature of conveyance/Execution Date(s):	
Execution Date(s) 9/27/05; 9/23/05; 9/26/05; 9/23/05	Street Address: 11 Wall Street
✓ Assignment Merger	
Security Agreement Change of Name	City: New York
Joint Research Agreement	
Government Interest Assignment	State: NY
Executive Order 9424, Confirmatory License	Country: USA Zip: 10005
Other	
4. Application or patent number(s): The A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence	
4. Application or patent number(s): The A. Patent Application No.(s) 11/183,043 Additional numbers	is document is being filed together with a new a B. Patent No.(s)
4. Application or patent number(s): The A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence	B. Patent No.(s) attached? Yes No 6. Total number of applications and pater involved:
4. Application or patent number(s): A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: Chris L. Holm	B. Patent No.(s) attached? Yes No 6. Total number of applications and pate
4. Application or patent number(s): A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed:	B. Patent No.(s) attached? Yes No 6. Total number of applications and pater involved: // 7. Total fee (37 CFR 1.21(h) & 3.41) \$40
4. Application or patent number(s): A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: Chris L. Holm Internal Address: Milbank, Tweed, Hadley & McCloy LLP	B. Patent No.(s) attached? Yes No 6. Total number of applications and pater involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$40 Authorized to be charged by credit care
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4. Application or patent number(s): A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: Chris L. Holm Internal Address: Milbank, Tweed, Hadley & McCloy LLP Street Address: 1 Chase Manhattan Plaza	B. Patent No.(s) attached? Yes No 6. Total number of applications and pater involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$40 Authorized to be charged by credit card Authorized to be charged to deposit according to the charged to the char
A. Application or patent number(s): A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: Chris L. Holm Internal Address: Milbank, Tweed, Hadley & McCloy LLP Street Address: 1 Chase Manhattan Plaza City: New York	B. Patent No.(s) attached? Yes No 6. Total number of applications and pater involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40 Authorized to be charged by credit care. Authorized to be charged to deposit acc. V Enclosed None required (government interest not at a company of the comp
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A. Application or patent number(s): A. Patent Application No.(s) 11/183,043 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name: Chris L. Holm Internal Address: Milbank, Tweed, Hadley & McCloy LLP Street Address: 1 Chase Manhattan Plaza City: New York State: NY Zip:10005 Phone Number: 212-540-5734 Fax Number: 212-822-5734	B. Patent No.(s) attached? Yes No 6. Total number of applications and pater involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40 Authorized to be charged by credit care. Authorized to be charged to deposit acc. V Enclosed None required (government interest not at a company of the comp
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PATENT REEL: 034501 FRAME: 0177

Docket No. 09163-23816

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

Burkhardt, Roger, 220 Taxter Road, Irvington, New York 10533; Allen, Anne E., 205 Watchung Ave., Cranford, N.J. 07105; McSweeney, Robert J., 157 Loines Avenue, Merrick, NY 11566; and Pastina, Louis G., 171 Beach 130th Street, Belle Harbor, NY 11694

(full name(s) and post office address(s) of inventor(s) (including country))

(hereinafter referred to as ASSIGNOR(S)), has made a discovery or invention entitled:

SYSTEM AND METHOD FOR PUBLISHING LIQUIDITY REPLENISHMENT PRICES IN A HYBRID AUCTION MARKET

	discovery	

- for which application for Letters Patent of the United States has been executed on even date herewith,
- [X] for which application for Letters Patent of the United States has been filed on July 15, 2005, under Serial No. 11/183,043, and

WHEREAS:

New York Stock Exchange, 11 Wall Street, New York, NY 10005

(name and address of assignee)

(hereinafter referred to as ASSIGNEE), is desirous of acquiring the entire interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefore in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted.

- l, SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and behalf of the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.
- I, SAID, ASSIGNOR(S), hereby covenant that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over;

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE, its successors, legal representatives, or assigns, communicate to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any facts known to me respecting said discover or invention, and execute and deliver and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives

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and assigns, and that it reissues of the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or re-filings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation and reissue applications so desired, and do all lawful acts requisite for the application for such reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discover in all countries, and without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

Assignor's signature:
Roger BURKHARDT
Citizenship: United Kingdom
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 20 day of September
STATE OF)
\$\$.:
COUNTY OF)
On this 27 day of September, 2015, before me, the undersigned authority, personally appeared to me Rosen Burkhand
known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and NANCY J. GINSBERG NOTARY PUBLIC, State of New York No. 01GI6048899 Qualified in Richmond County Commission Expires October 02, 20 Assignor's signature: Anne E. ALLEN
Citizenship: United States
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 23 rd day of Seatings.
STATE OF N √)
ss.:
COUNTY OF (V)
On this 23 day of Spenker, 2005 before me, the undersigned authority, personally appeared Anne E. Allen
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.
Pier Tisdel Notary Public Notary Public, State of New York No. 01T16115336 Qualified in Queens County Commission Expires September 7, 20

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Assignor's signature: X law bulling
Robert J. McSWEENEY
Citizenship: United States
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 26 day of September 20 05
STATE OF)
ss.:
COUNTY OF)
On this <u>Alo</u> day of <u>September</u> , 2005 before me, the undersigned authority, personally appeared Robert J. McSweet
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified. NANCY J. GINSBERG NOTARY PUBLIC, State of New York No. 01GI6048899 Qualified in Richmond County Commission Expires October 02, 20
Assignor's signature: Assignor's signature:
Louis G. PASTINA
Citizenship: United States
IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this day of september 2005
STATE OF NY)
ss.:
COUNTY OF (*)
On this 23 day of September, 20 5 before me, the undersigned authority, personally appeared Lovis b. Pashina
to me known and known to me to be the individual who is described in and who executed the foregoing Assignment, and who duly acknowledged to me that he executed the same as his own voluntary act and deed for the uses and purposed therein specified.
Notary Public Pier Tindal Notary Public, State of New York No. 01Ti6115336 Qualified in Queeas County

- 3 -

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