04-28-2006

U.S. DEPARTMENT OF COMMERCE **RECOF** Patent and Trademark Office 103229491 Attorney Ref. No. 03-1117-A commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. To The Honorable Name and address of receiving party(ies) Name of conveying parties: Alvin F. Tanpoco Trading Technologies International, Inc. Name: Internal Address: 222 South Riverside Plaza, Suite 1100 Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No Chicago, Illinois 60606 Nature of conveyance: ■ Assignment □ Merger ☐ Security Agreement ☐ Change of Name ☐ Other: Execution Date: April 21, 2006 Additional name(s) & address(es) attached? ☐ Yes ☒ No Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: April 21, 2006 A. Patent Application No.(s) B. Patent No.(s) 04/26/2006 SHASSEN1 00000003 11409346 01 FC:8021 Additional numbers attached? ☐ Yes ☒No Name and address of party to whom correspondence concerning document should be mailed: Total number of applications and patents involved: 1 Name: Joseph A. Herndon Total Fee (37 CFR 3.41).....\$40.00 Company Name: McDonnell, Boehnen, Hulbert & Berghoff LLP ☐ Authorized to be charged to deposit account Street Address: 300 South Wacker Drive, Suite 3200 Deposit account number: 13-2490 City: Chicago State: IL ZIP: 60606 DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Joseph A. Herndon

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PATENT REEL: 017808 FRAME: 0668

April 21, 2006

ASSIGNMENT

Case No.:

Inventors: Alvin F. Tanpoco

Date of Execution of Application:

Serial No.:

Filing Date:

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

Trading Technologies International, Inc., a corporation of the State of Delaware

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

SYSTEM AND METHOD FOR DYNAMICALLY DETERMINING OUANTITY FOR RISK MANAGEMENT

and identified as:

Case No.

in the offices of McDonnell Boehnen Hulbert & Berghoff and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assigned to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

> PATENT REEL: 017808 FRAME: 0669

WITNESS my hand and seal this 21 day of APRIL, 2006

Alvin F. Tanpoco

State of

County of

The foregoing instrument was acknowledged before me this 2154 day of

price, sone by aluin F. Tanpaco

NOTARY PUBLIC

"OFFICIAL SEAL"

JILL P. FITZPATRICK

NOTARY PUBLIC, STATE OF ILLINOIS

MY COMMISSION EXPIRES 12/9/2008

PATENT

REEL: 017808 FRAME: 0670