PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | | NEW ASSIGNMENT | | | | | |
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| NATURE OF CONVEYANCE: | | ASSIGNMENT | | | | | |
| CONVEYING PARTY DATA | | | | | | | |
| Name Execution Date | | | | | | | |
| Corentin Rordorf 07/20/2009 | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | |
| Name: | Morgan Stanley (a | Delaware corporation) | | | | | |
| Street Address: | 1585 Broadway | | | | | | |
| City: | New York | | | | | | |
| State/Country: | NEW YORK | | | | | | |
| Postal Code: | 10036 | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | |
| Property Ty | /pe | Number | | | | | |
| Application Number: 12480 | | 0979 | 6260 | | | | |
| CORRESPONDENCE | DATA | | 12480979 | | | | |
| Fax Number: (412)355-6501 | | | | | | | |
| Fax Number: | (412)355-650 | 1 | 0 | | | | |
| Correspondence will b | e sent via US Mail | when the fax attempt is unsuccessful. | 00 00 | | | | |
| <i>Correspondence will b</i> Phone: | <i>e sent via US Mail</i> 412-355-6595 | when the fax attempt is unsuccessful. | \$40.00 | | | | |
| <i>Correspondence will b</i> Phone: Email: | e <i>sent via US Mail</i> 412-355-659 patents@klga | when the fax attempt is unsuccessful. 5 ites.com | | | | | |
| <i>Correspondence will b</i> Phone: | e sent via US Mail 412-355-6599 patents@klga Lucas V. Hau | when the fax attempt is unsuccessful. | CH \$40.00 | | | | |
| <i>Correspondence will b</i> Phone: Email: Correspondent Name: | e sent via US Mail 412-355-6595 patents@klga Lucas V. Hau 535 SMITHFI | when the fax attempt is unsuccessful. 5 ites.com gh - K&L Gates LLP | | | | | |
| <i>Correspondence will b</i> Phone: Email: Correspondent Name: Address Line 1: | e sent via US Mail 412-355-659 patents@klga Lucas V. Hau 535 SMITHFI HENRY W. O | when the fax attempt is unsuccessful. 5 ites.com gh - K&L Gates LLP ELD STREET | | | | | |
| <i>Correspondence will b</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: | e sent via US Mail 412-355-6599 patents@klga Lucas V. Hau 535 SMITHFI HENRY W. O PITTSBURGI | when the fax attempt is unsuccessful. 5 ites.com gh - K&L Gates LLP ELD STREET LIVER BUILDING | | | | | |
| Correspondence will b Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: | e sent via US Mail 412-355-659 patents@klga Lucas V. Hau 535 SMITHFI HENRY W. O PITTSBURGI | when the fax attempt is unsuccessful. 5 htes.com gh - K&L Gates LLP ELD STREET LIVER BUILDING H, PENNSYLVANIA 15222-2312 | | | | | |

PATENT REEL: 023091 FRAME: 0614 TO:LUCAS V. HAUGH COMPANY:535 SMITHFIELD STREET



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE



* 500925083/4*

AUGUST 04, 2009

PTAS

LUCAS V. HAUGH 535 SMITHFIELD STREET HENRY W. OLIVER BUILDING PITTSBURGH, PA 15222-2312

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DOCUMENT ID NO.: 500925083

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PATENT REEL: 023091 FRAME: 0615

TO:LUCAS V. HAUGH COMPANY:535 SMITHFIELD STREET

| PATENT ASSIGNMENT | | | | | |
|--|---------------------------|----------|-------------------------|----------------|--|
| Electronic Version Stylesheet Version | | | 07/31/2009 500925083 | | |
| SUBMISSION TYPE: | | | NEW ASSIGNMENT | | |
| NATURE OF CONVEYANCE: | | | ASSIGNMENT | | |
| CONVEYING PAR | TY DATA | | | | |
| | | N | lame | Execution Date | |
| Corentin Rordorf | | | | 07/20/2009 | |
| RECEIVING PART | Y DATA | | | | |
| Name: | Morgan Stan | ley (a [| Delaware corporation) | | |
| Street Address: | 1585 Broadw | | | | |
| City: | New York | | | | |
| State/Country: | NEW YORK | NEW YORK | | | |
| Postal Code: | 10036 | 10036 | | | |
| PROPERTY NUMB | ERS Total: 1 | | | | |
| Property Type | | | Number | | |
| Application Number: 12480 | | 12480 | 979 | 6260 | |
| CORRESPONDEN | CE DATA | | | 12480979 | |
| Fax Number: (412)355-6501 | | | | | |
| Correspondence will be sent via US Mail when the fax attempt is unsuccessful. Phone: 412-355-6595 | | | | | |
| Email: | nail: patents@klgates.com | | | | |
| Correspondent Nan | ne: Lucas V. Haugh | | | | |
| Address Line 1: | 535 SMITHFIELD STREET | | | | |
| Address Line 2: HENRY W. OLIVER BUILDING Address Line 4: PITTSBURGH, PENNSYLVANIA 15222-2312 | | | | | |
| ATTORNEY DOCKET NUMBER: | | | 080733 | | |
| NAME OF SUBMITTER: | | | Lucas V. Haugh | | |
| Total Attachments: 1 source=assignment#page1.tif | | | | | |

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

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

SYSTEM AND METHOD FOR CALCULATING A FINANCIAL MARKET INDEX

for which application for Letters Patent of the United States has been executed on even date herewith, or

Serial No. <u>12/480.979</u>, and

WHEREAS:

Morgan Stanley, a Delaware corporation with an office at 1585 Broadway, New York. New York 10036 (hereinafter referred to at ASSIGNEE), is desirous of acquiring the entire right, title and interest in, to and under said invention or discovery, and in, to and under said United States application, and in, to and under Letters Patent or similar legal protection to be granted thereon in the United States and in any and all foreign countries, and of confirming the same or any part thereof heretofore acquired by ASSIGNEE.

NOW, THEREFORE:

In consideration of the payment by ASSIGNEE to the ASSIGNOR of the sum of One Dollar (\$1,00) and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR hereby sells, assigns, transfers to and confirm in ASSIGNEE, its successors, legal representatives and assigns, the full and exclusive right, title and interest to said invention or discovery in the United States and its territorial possessions and in all foreign countries; and to said United States application and any and all other applications on said invention or discovery in whatsoever countries, including any continuations, divisions, substitutes or renewals; and to all Letters Patent, and all reissues, re-examinations, and extensions thereof, or similar legal protection in the United States and its territorial possessions and its territorial possessions and in any and all foreign countries to be obtained for said invention or discovery or upon said applications or any legal equivalent thereof in a foreign country for the full term or terms for which the same may be granted; and every priority right that is or may be predicated upon or arise from said invention or discovery, said applications and said Letters Patent,

I, SAID ASSIGNOR, hereby authorizes and requests the Director of the United States Patent and Trademark Office, the Commissioner for Patents of the United States of America, any other United States Official, and/or 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 offoreshid, to issue or transfer all such Letters Patent for said invention or discovery 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, hereby covenant that I have full right to convey the entire right, litle and interest herein sold, assigned, transferred, set over and confirmed, and that I have not executed and will not execute any agreement in conflict herewith;

AND I, SAID ASSIGNOR, hereby further covenants and agrees that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for Letters Palent in any or all countries on said invention or discovery in our names or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, and may claim the benefits of the International Convention or otherwise claim priority rights;

PI-2188489 v2 0806995-00384

PATENT REEL: 023091 FRAME: 0617

AND I. SAID ASSIGNOR, hereby further covenants 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 us respecting said invention or discovery or the history thereof, including without limitation the furnishing of any and all documents, photographs, models, samples and other physical exhibits in our control which may be useful for establishing the facts of our conception, disclosures, and reduction to practice of said invention or discovery; execute and deliver to the ASSIGNEE, its successors, legal representatives, or assigns, as the case may be, any and all lawful papers that may be necessary or desirable to perfect the title to the said invention or discovery, the said applications and the said Letters Patent in the ASSIGNEE, its successors, legal representatives and assigns; if reissues, re-examinations, or other like proceedings involving the said Letters Patent or disclaimers relating thereto, or divisions, continuations, or refilings of the said applications, or any thereof, shall hereafter be desired by the ASSIGNEE, its successors, legal representatives, or assigns, I will sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation, re-examination and reissue applications so desired, and do all lawful acts requisite for the application for such reissues, re-examinations and the procuring thereof and for the filing of such discialmers and such applications; and generally do everything possible, including testifying in any legal proceedings, signing all lawful papers and making all rightful caths, to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention or discovery in all countries, and without further compensation but at the expense of the ASSIGNEE, its successors, legal representatives and assigns.

IN WITNESS WHEREOF, I have hereunto affixed my signature on the date and year opposite my signature.

| Assignor's Typed Name: <u>Corontin</u> Pirst Name Middle Initial Last Name Citizenship: USA FRANCE STATE OF) COUNTY OF) On this <u>day of , before me, the undersigned authority, personally</u> appeared , known and known to me to be the individual who | Assignor's Signature: | - J.S. | 4 | 20- July - 200 |
|---|-----------------------|--------|------------------|--|
| Pirst Name Middle Initial Last Name Citizenship: USA FRANCE STATE OF) COUNTY OF) On this day of, before me, the undersigned authority, personally | | | | and the second sec |
| Citizenship: 48A FRANCE STATE OF) COUNTY OF) On this before me, the undersigned authority, personally | Name: | | Middle Initial | |
| COUNTY OF) On this, before me, the undersigned authority, personally | STATE OF | RANCE | | |
| minimum Burn have been all the minimum second and the second se | |) | | |
| described in and who executed the foregoing Assignment, and who duly acknowledged to me that he/she execute | appearec | | , known and know | on to me to be the individual who is |

Notary Public