

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT						
NATURE OF CONVEYANCE:	ASSIGNMENT						
CONVEYING PARTY DATA							
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Joel C. Hodes</td><td>01/26/2006</td></tr><tr><td>John A. Roberts</td><td>02/26/2007</td></tr></tbody></table>	Name	Execution Date	Joel C. Hodes	01/26/2006	John A. Roberts	02/26/2007	
Name	Execution Date						
Joel C. Hodes	01/26/2006						
John A. Roberts	02/26/2007						
RECEIVING PARTY DATA							
Name:	Morgan Stanley						
Street Address:	1585 Broadway						
City:	New York						
State/Country:	NEW YORK						
Postal Code:	10036						
PROPERTY NUMBERS Total: 1							
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>10865046</td></tr></tbody></table>	Property Type	Number	Application Number:	10865046			
Property Type	Number						
Application Number:	10865046						
CORRESPONDENCE DATA							
Fax Number:	(412)355-6501						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	412 355-8994						
Email:	patents@klnq.com						
Correspondent Name:	Michael D. Lazzara						
Address Line 1:	535 Smithfield Street						
Address Line 2:	Henry W. Oliver Building						
Address Line 4:	Pittsburgh, PENNSYLVANIA 15222-2312						
ATTORNEY DOCKET NUMBER:	030346						
NAME OF SUBMITTER:	Michael D. Lazzara						
Total Attachments: 6							
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**ASSIGNMENT OF APPLICATION FOR PATENT**

**(JOINT INVENTORS)**

WHEREAS:

Joel C. Hodes residing at 77 Park Avenue, Apt. 36, New York, NY 10016, a citizen of the USA

John A. Roberts residing at 24 Trevor Lake Drive, Congers, NY 10920, a citizen of the USA

(full names and residential addresses of inventors (including countries of citizenship))

(hereinafter referred to as ASSIGNORS), have made an invention or discovery entitled:

**INVESTMENT METHODS AND SYSTEMS FOR USE IN ASSOCIATION WITH A PAIRS TRADING STRATEGY**

(title of invention or discovery)

- ☐ for which application for Letters Patent of the United States has been executed on even date herewith, and
- ☒ for which application for Letters Patent of the United States has been filed on June 10, 2004, under Serial No. 10/865,046 and

WHEREAS:

Morgan Stanley with an office at 1585 Broadway, New York, New York 10036 (hereinafter referred to as 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 each of ASSIGNORS of the sum of One Dollar (\$1.00) and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer 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 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,

WE, SAID ASSIGNORS, hereby authorize and request 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 aforesaid, 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.

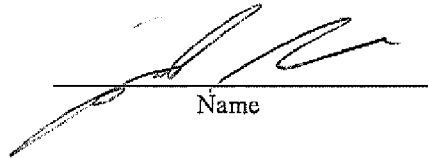
WE, SAID ASSIGNORS, hereby covenant that we have full right to convey the entire right, title and interest herein sold, assigned, transferred, set over and confirmed, and that we have not executed and will not execute any agreement in conflict herewith;

AND WE, SAID ASSIGNORS, hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for Letters Patent 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;

AND WE, SAID ASSIGNORS, hereby further covenant that we 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, we 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 disclaimers and such applications; and generally do everything possible, including testifying in any legal proceedings, signing all lawful papers and making all rightful oaths, 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 Signature:

  
Name

1/26/2006  
Date

Assignor's Typed  
Name:

Joel C. Hodes  
First Name Middle Initial Last Name

Citizenship:

US

STATE OF

1 New York

ss.:

COUNTY OF

1 New York

On this 26<sup>th</sup> day of JANUARY 2006, before me, the undersigned authority, personally appeared Joel Hodes, 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/she executed the same as his/her own voluntary act and deed.

Notary Public



**MARY J. HOLLOWELL**  
Notary Public, State of New York  
No. 01HO6100211  
Qualified in Kings County  
Commission Expires October 14, 2007

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

Assignor's Signature:

Name

Date \_\_\_\_\_

Assignor's Typed  
Name:

John

A.

**Roberts**

First Name

Middle Initial

Last Name

Citizenship:

STATE OF )  
                  ss.:  
COUNTY OF )

On this \_\_\_\_\_ day of \_\_\_\_\_, before me, the undersigned authority, personally appeared \_\_\_\_\_, 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/she executed the same as his/her own voluntary act and deed.

Notary Public

Docket No. 030346

ASSIGNMENT OF APPLICATION FOR PATENT(JOINT INVENTORS)

WHEREAS:

Joel C. Hodes residing at 77 Park Avenue, Apt. 36, New York, NY 10016, a citizen of the USAJohn A. Roberts residing at 15 Astell Street, London, England SW3 3RT, a citizen of the United Kingdom

(full names and residential addresses of inventors (including countries of citizenship))

(hereinafter referred to as ASSIGNORS), have made an invention or discovery entitled:

INVESTMENT METHODS AND SYSTEMS FOR USE IN ASSOCIATION WITH A PAIRS TRADING STRATEGY  
(title of invention or discovery)☐ for which application for Letters Patent of the United States has been executed on even date herewith, and☒ for which application for Letters Patent of the United States has been filed on June 10, 2004, under Serial  
No. 10/865,046 and

WHEREAS:

Morgan Stanley with an office at 1555 Broadway, New York, New York 10036 (hereinafter referred to as 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 each of ASSIGNORS of the sum of One Dollar (\$1.00) and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer 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 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,

WE, SAID ASSIGNORS, hereby authorize and request 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 aforesaid, 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.

PL-1176228 v1 0806995-0104

Docket No. 030346

WE, SAID ASSIGNORS, hereby covenant that we have full right to convey the entire right, title and interest herein sold, assigned, transferred, set over and confirmed, and that we have not executed and will not execute any agreement in conflict herewith;

AND WE, SAID ASSIGNORS, hereby further covenant and agree that the ASSIGNEE, its successors, legal representatives, or assigns, may apply for Letters Patent 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;

AND WE, SAID ASSIGNORS, hereby further covenant that we 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, we 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 disclaimers and such applications; and generally do everything possible, including testifying in any legal proceedings, signing all lawful papers and making all rightful oaths, 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 Signature:

Name

Date

Assignor's Typed

Name:

Joel

C.

Hodes

First Name

Middle Initial

Last Name

Citizenship:

STATE OF )

ss.:

COUNTY OF )


On this \_\_\_\_\_ day of \_\_\_\_\_, before me, the undersigned authority, personally appeared \_\_\_\_\_ 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/she executed the same as his/her own voluntary act and deed.

Notary Public

Docket No. 030346

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

Assignor's Signature:

  
Name

26.04.07

Date

Assignor's Typed

Name:

John

First Name

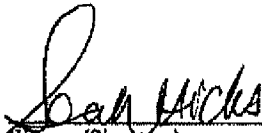
A.

Middle Initial

Roberts

Last Name

Citizenship: United Kingdom

  
Witness (Signature)

26.04.07

Date

SARAH HICKS

Witness (Printed Name)