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8.12.99

**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

Assistant Commissioner for Patents: Please record the attached original document.


1. Name of conveying party(ies):  
**Thomas Begley, Peter Nash, Paul O'Connell,  
Mark Snuffin and Stephen Joufflas**

2. Name and address of receiving party(ies):  
**The NASDAQ Stock Market, Inc.  
1735 K Street, N.W.  
Washington, DC 20006**

Additional name(s) attached?  Yes  No

Additional names/addresses attached?  Yes  No

3. Nature of conveyance:  
 Assignment  
 Merger  
 Security Agreement  
 Change of Name  
 Other:

08-17-1999  
  
101118825

Execution Date: **5/21/99; 7/20/99**

4. Application number(s) or patent number(s):  
If this document is being filed with a new application, the execution date of the application is:  
A. Patent Application No.(s): **09/191,655**  
B. Patent No.(s):

Additional numbers attached?  Yes  No

5. Name/address of party to whom correspondence concerning document should be mailed:  
  
**Denis G. Maloney, Reg. No. 29,670  
Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804**

6. Total number of applications/patents involved: **1**  
7. Total fee (37 CFR 3.41): **\$40**  
 Enclosed  
 Authorized to charge deposit account  
8. Deposit account number: **06-1050**  
If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.

**DO NOT USE THIS SPACE**

9. Statement and signature: *To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.*

**Denis G. Maloney, Reg. No. 29,670**  
Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: **7**

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40.00 OP

Date of Deposit August 9, 1999  
I hereby certify under 37 CFR 1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Marie S. Collins  
Marie S. Collins PATENT  
REEL: 010160 FRAME: 0341

ASSIGNMENT

For valuable consideration, we, Thomas Begley, of Great Falls, Virginia; Peter Nash, of Cheverly, Maryland; Paul O'Connell, of Ashburn, Virginia; Mark Snuffin, of Bethesda, Maryland; Stephen Joufflas, of Frederick, Maryland; hereby assign to The NASDAQ Stock Market, Inc., a Delaware corporation having a place of business at 1735 K Street, N.W., Washington, DC 20006, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled REPORT GENERATION ARCHITECTURE FOR REMOTELY GENERATED DATA, filed November 13, 1998, and assigned U.S. Serial Number 09/191,655, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at Bethesda, this 28<sup>th</sup> day of July, 1999.  
Thomas Begley L.S.  
Thomas Begley

STATE OF MD :  
:ss.  
COUNTY OF Montgomery :

Before me this 28<sup>th</sup> day of July, 1999 personally appeared Thomas Begley known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Leslie J. Day  
Notary Public  
My Commission Expires: 2/1/03

[Notary's Seal Here]

Leslie J. Day, Notary Public  
Montgomery County  
State of Maryland  
My Commission Expires Feb. 1, 2003

IN WITNESS WHEREOF, I hereto set my hand and seal at Bethesda

this 20<sup>th</sup> day of July, 19 99

Peter Nash  
Peter Nash L.S.

STATE OF MD :

COUNTY OF Montgomery :  
:ss.

Before me this 20<sup>th</sup> day of July, 1999 personally appeared Peter Nash known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Leslie J. Day  
Notary Public

Leslie J. Day, Notary Public  
Montgomery County  
State of Maryland  
My Commission Expires Feb. 1, 2003

My Commission Expires: 2/1/03

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at BETHESDA, MD

this 20<sup>th</sup> day of July, 19 99

Paul O'Connell  
Paul O'Connell L.S.

STATE OF MD :

COUNTY OF MONTGOMERY :  
:ss.

Before me this 20<sup>th</sup> day of July, 1999 personally appeared Paul O'Connell known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Leslie J. Day  
Notary Public

Leslie J. Day, Notary Public  
Montgomery County  
State of Maryland  
My Commission Expires Feb. 1, 2003

My Commission Expires: 2/1/03

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,

this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_

L.S.

Mark Snuffin

STATE OF \_\_\_\_\_:

:ss.

COUNTY OF \_\_\_\_\_:

Before me this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_, personally appeared Mark Snuffin known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

\_\_\_\_\_  
Notary Public

My Commission Expires:

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at Bethesda, MD,  
this 20<sup>th</sup> day of July, 1999

Stephen Joufflas  
\_\_\_\_\_  
Stephen Joufflas

L.S.

STATE OF MD:

:ss.

COUNTY OF MONTGOMERY:

Before me this 20<sup>th</sup> day of July, 1999, personally appeared Stephen Joufflas known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Leslie J. Day  
\_\_\_\_\_  
Notary Public

My Commission Expires:

2.1.03

[Notary's Seal Here]

347753-1

Leslie J. Day, Notary Public  
Montgomery County  
State of Maryland  
My Commission Expires Feb. 1, 2003

ASSIGNMENT

For valuable consideration, we, Thomas Begley, of Great Falls, Virginia; Peter Nash, of Cheverly, Maryland; Paul O'Connell, of Ashburn, Virginia; Mark Snuffin, of Bethesda, Maryland; Stephen Joufflas, of Frederick, Maryland; hereby assign to The NASDAQ Stock Market, Inc., a Delaware corporation having a place of business at 1735 K Street, N.W., Washington, DC 20006, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us this day, entitled REPORT GENERATION ARCHITECTURE FOR REMOTELY GENERATED DATA, filed November 13, 1998, and assigned U.S. Serial Number 09/191,655, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,  
this 7<sup>th</sup> day of April, 1999  
Thomas Begley L.S.  
Thomas Begley

STATE OF MD :  
COUNTY OF Montgomery :ss.

Before me this 14 day of April, 1999, personally appeared Thomas Begley known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Heather Fara Poholsky  
Notary Public  
My Commission Expires: December 28, 2002

[Notary's Seal Here]

HEATHER FARA POHOLSKY  
Notary Public, State of New York  
No. 01P06018102  
Qualified in Richmond County  
Commission Expires Dec. 28, 2002

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,

this 7<sup>th</sup> day of April, 1999

Peter Nash L.S.  
Peter Nash

STATE OF Maryland :

:ss.

COUNTY OF Montgomery :

Before me this 14 day of April, 1999 personally appeared Peter Nash known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Heather Fara Poholsky  
Notary Public

My Commission Expires: 12/28/2000

[Notary's Seal Here]  
HEATHER FARA POHOLSKY  
Notary Public, State of New York  
No. 01PO6018102  
Qualified in Richmond County  
Commission Expires Dec. 28, 2000

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,

this 7<sup>th</sup> day of April, 1999

Paul O'Connell L.S.  
Paul O'Connell

STATE OF VIRGINIA :

:ss.

COUNTY OF LOUDON :

Before me this 14 day of April, 1999 personally appeared Paul O'Connell known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Heather Fara Poholsky  
Notary Public

My Commission Expires: 12/28/2000

[Notary's Seal Here]

HEATHER FARA POHOLSKY  
Notary Public, State of New York  
No. 01PO6018102  
Qualified in Richmond County  
Commission Expires Dec. 28, 2000

IN WITNESS WHEREOF, I hereto set my hand and seal at Bethesda Maryland,  
this 21st day of May, 1999  
Mark Snuffin L.S.  
Mark Snuffin

STATE OF MARYLAND :  
:ss.  
COUNTY OF MONTGOMERY :

Before me this 21st day of May, 1999, personally appeared Mark Snuffin known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Signature]  
Notary Public

My Commission Expires: May 1, 2002

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_,  
this 7th day of April, 1999 \_\_\_\_\_ L.S.  
Stephen Joufflas

STATE OF Maryland :  
:ss.  
COUNTY OF Montgomery :

Before me this 14 day of April, 1999, personally appeared Stephen Joufflas known to me to be the person whose name is subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Signature]  
Notary Public

My Commission Expires: 12/08/2000

[Notary's Seal Here]

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HEATHER FARA POHOLSKY  
Notary Public, State of New York  
No. 01P06018102  
Qualified in Richmond County  
Commission Expires Dec. 28, 2012