

PATENT ASSIGNMENT

Electronic Version v1.1
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| 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>Georges H. Guirguis</td> <td>02/20/2013</td> </tr> <tr> <td>Scott Pope</td> <td>02/20/2013</td> </tr> </tbody> </table> | | Name | Execution Date | Georges H. Guirguis | 02/20/2013 | Scott Pope | 02/20/2013 | | | | |
| Name | Execution Date | | | | | | | | | | |
| Georges H. Guirguis | 02/20/2013 | | | | | | | | | | |
| Scott Pope | 02/20/2013 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>SAS Institute Inc.</td> </tr> <tr> <td>Street Address:</td> <td>SAS Campus Drive</td> </tr> <tr> <td>City:</td> <td>Cary</td> </tr> <tr> <td>State/Country:</td> <td>NORTH CAROLINA</td> </tr> <tr> <td>Postal Code:</td> <td>27513</td> </tr> </table> | | Name: | SAS Institute Inc. | Street Address: | SAS Campus Drive | City: | Cary | State/Country: | NORTH CAROLINA | Postal Code: | 27513 |
| Name: | SAS Institute Inc. | | | | | | | | | | |
| Street Address: | SAS Campus Drive | | | | | | | | | | |
| City: | Cary | | | | | | | | | | |
| State/Country: | NORTH CAROLINA | | | | | | | | | | |
| Postal Code: | 27513 | | | | | | | | | | |
| 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>13772404</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13772404 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 13772404 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| <p>Fax Number: 2165790212 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 216-586-7199 Email: skoston@jonesday.com Correspondent Name: Jones Day Address Line 1: 901 Lakeside Avenue Address Line 2: North Point Address Line 4: Cleveland, OHIO 44114-1190</p> | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 343355-600346 | | | | | | | | | | |
| NAME OF SUBMITTER: | F. Drexel Feeling | | | | | | | | | | |
| <p>Total Attachments: 3 source=SAS346Assignment#page1.tif source=SAS346Assignment#page2.tif source=SAS346Assignment#page3.tif</p> | | | | | | | | | | | |

CH \$40.00 13772404

ASSIGNMENT

WHEREAS, one or more inventions have been made by the undersigned in

SYSTEM AND METHOD FOR FAST IDENTIFICATION OF VARIABLE ROLES DURING INITIAL DATA EXPLORATION

and are the subject of a patent application filed in the United States Patent and Trademark Office herewith, which application is identified as Jones Day Docket No. **343355-600346**.

WHEREAS, **SAS INSTITUTE INC.**, a **North Carolina** corporation, located and doing business at **SAS Campus Drive, Cary, North Carolina 27513**, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest in said inventions and patent rights therefor throughout the world.

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, **THE UNDERSIGNED HEREBY SELLS, ASSIGNS, TRANSFERS, AND DELIVERS TO ASSIGNEE** all right, title, and interest, in the United States and throughout the world, in said inventions and all patents, patent rights, patent applications, and inventor's certificates for said inventions, including without limitation said application for patent in the United States and all provisionals, divisions, continuations, continuations-in-part, and resulting patents, all right to sue for infringement or past infringement, and all patents and patent rights that may be granted for said inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary or desirable to secure for or vest in assignee, its successors or assigns, any invention right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Patent and Trademark Office is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in the patents, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in the patents.

The undersigned hereby grants the firm of Jones Day the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment has been executed below by the undersigned:



GEORGES H. GUIRGUIS

2/20/13

Date

Post Office Address: 106 Widecombe Court
Cary, North Carolina 27513

STATE OF NORTH CAROLINA }
 } ss.
COUNTY OF WAKE }

GEORGES H. GUIRGUIS appeared before me this 20th day of February, 2013, and acknowledged that the foregoing instrument was executed as his free act and deed for the uses and purposes set forth therein.

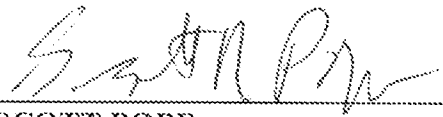
Uneada Lester Harris
Notary Public
Wake County
North Carolina



Notary Public: Uneada Lester Harris

My Commission Expires: July 25, 2014

IN WITNESS WHEREOF, this Assignment has been executed below by the undersigned:



SCOTT POPE

2-20-2013

Date

Post Office Address: 219 Tecumseh Court
Raleigh, North Carolina 27607

STATE OF NORTH CAROLINA }
 } ss.
COUNTY OF WAKE }

SCOTT POPE appeared before me this 20th day of February, 2013, and acknowledged that the foregoing instrument was executed as his free act and deed for the uses and purposes set forth therein.

Uneada Lester Harris
Notary Public
Wake County
North Carolina



Notary Public: Uneada Lester Harris

My Commission Expires: July 25, 2014