

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PAUL PALLATH	11/30/2016
YING WU	11/30/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BUSINESS OBJECTS SOFTWARE LTD.
<b>Street Address:</b>	1012-1014 KINGSWOOD AVENUE
<b>Internal Address:</b>	CITYWEST BUSINESS CAMPUS
<b>City:</b>	DUBLIN
<b>State/Country:</b>	IRELAND
<b>Postal Code:</b>	24
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16277725
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<b>ATTORNEY DOCKET NUMBER:</b>	22135-0972002
<b>NAME OF SUBMITTER:</b>	CANDICE R. ROCKETT
<b>SIGNATURE:</b>	/Candice R. Rockett/
<b>DATE SIGNED:</b>	02/15/2019
<b>Total Attachments: 2</b>	
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ASSIGNMENT

For valuable consideration, we, **Paul Pallath** and **Ying Wu**, hereby assign to **Business Objects Software Ltd.**, a corporation of Ireland, having a place of business at 25/28 North Wall Quay, Dublin 1 IRELAND, and its successors, and assigns (collectively, "the ASSIGNEE") our entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled

**TIME SERIES ANALYSIS USING A CLUSTERING BASED SYMBOLIC REPRESENTATION,**

which is found in the

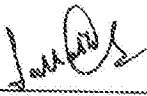
U.S. patent application filed on November 30, 2016  
[X] under Application No. 15/364,681

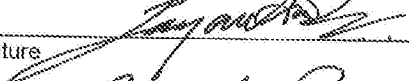
We authorize and request the attorneys of record or the attorney filing the application to insert into this assignment the filing date and serial number of the application when known.

This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent 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. We authorize the Assignee to apply in all countries in our names 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.

We hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment.

We further agree for ourselves and our respective heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to us and to testify as to the same in any interference, litigation, or proceeding relating thereto; and we agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Signature   
Paul Pallath

Witnessed by:   
Signature Jayanta Roy  
Print Name

30<sup>th</sup> NOV 2016  
Date

Inventor's Signature Ying Wu  
Ying Wu

Witnessed by: [Signature]  
Signature  
SOLAJA LIAW  
Print Name

30/11/2016  
Date