503103580 12/16/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ersion v1.1 EPAS ID: PAT3150187

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MAHESH RAGHAVAN	12/11/2014
LAWRENCE STEVEN BACH	12/05/2014
DANA RIGG	12/10/2014
PETER ELLIOTT HAYNES	12/10/2014

RECEIVING PARTY DATA

Name:	DASSAULT SYSTEMES AMERICAS CORP.	
Street Address:	175 WYMAN STREET	
City:	WALTHAM	
State/Country:	MASSACHUSETTS	
Postal Code:	02451	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14572367	

CORRESPONDENCE DATA

Fax Number: (314)612-2307

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 314-621-5070

Email: USpatents@armstrongteasdale.com

Correspondent Name: PATENT DOCKET DEPARTMENT ARMSTRONG TEASD

Address Line 1: 7700 FORSYTH BOULEVARD

Address Line 2: SUITE 1800

Address Line 4: ST. LOUIS, MISSOURI 63105

ATTORNEY DOCKET NUMBER:	33645-10
NAME OF SUBMITTER:	ROBERT B. REESER, III
SIGNATURE: /Robert B. Reeser, III/	
DATE SIGNED:	12/16/2014

Total Attachments: 6

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PATENT 503103580 REEL: 034520 FRAME: 0650

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> PATENT REEL: 034520 FRAME: 0651

COMBINED DECLARATION AND GLOBAL ASSIGNMENT

FOR UTILITY OR DESIGN PATENT APPLICATION

As the below named inventor(s), I/we hereby declare that:

This declaration and assignment are directed to:

METHODS AND SYSTEMS FOR FILTERING COMPONENTS IN HIERARCHICALLY-REFERENCED DATA

\boxtimes	the specification of which is attached hereto OR	
	United States application or PCT international application number	
	filed on	, as
	amended on [date] (if applicable).	_
	(We hereby authorize and request the Company or its delegated attorneys or	•
	insert above the application number and filing date of the application when know	/ii.)

The above-identified application was made or authorized to be made by us.

We believe that we are original joint inventors of a claimed invention in the application.

We hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC § 1001 by fine or imprisonment of not more than five (5) years, or both.

We have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application as defined in 37 CFR § 1.56, including, for continuation-in-part applications, material information which became available between the filing date of the prior application and the filing date of the continuation-in-part application.

In accordance with our obligation(s) under an Employee Innovation and Proprietary Information Agreement or (as applicable) arising out of other agreements (such as, but not limited to, the Services Agreement between General Electric Company, a New York corporation, and our employers), and/or for other good and valuable consideration of which we acknowledge receipt, I/we,

Inventor First Name	Inventor Middle Name	Inventor Last Name	Residence Town	Residence State	Residence Country
Mahesh		Raghavan	Denville	New Jersey	United States
Lawrence	Steven	Bach	Chester	New Hampshire	United States
Dana		Rigg	Austin	Texas	United States
Peter	Elliott	Haynes	Costa Mesa	California	United States

PATENT REEL: 034520 FRAME: 0652 Docket No. 33645-10

hereby sell and assign to:

Name of Company: Dassault Systemes Americas Corp.		
Entity Type (optional): Delaware corporation		
Address: 175 Wyman Street, Waltham, Massachusetts 02451 USA		

herein referred to as "Company", its successors and assigns our entire respective rights, titles and interests in and to the invention and improvements made or conceived by us described in the application(s) listed above and in the following table:

Country of Filing	Type of Filing	Application Number	Filing Date	Title

(We hereby authorize and request the Company or its delegated attorneys or agents to insert above the application number and filing date of the application(s) when known.)

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, continuations-in-part, reexaminations, renewals, and reissues thereof, and all rights of priority resulting from the filing of the application(s), and authorize and request any official whose duty it is to issue patents, to issue any patent on the inventions and improvements resulting therefrom to the Company, or its successors or assigns, and agree that on request and without further consideration, we will communicate to the Company or its representatives or nominees any facts known to us respecting the inventions and improvements and testify in any legal proceeding, make all rightful oaths, sign all lawful papers and execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including. but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.

Remuneration claims of the inventor(s)/assignor(s) potentially arising from German Law on Employee Inventions, or any other respective country law, remain unaffected by this assignment.

Docket No. 33645-10 **INVENTOR 1** Signature: Date: Mahesh Raghavan Witnessed by: _ Date: Signature **Printed Name of Witness** Witnessed by: Date: Signature **Printed Name of Witness** SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY Date: 12/11/2014 Mahesh Raghavan STATE OF NEW TENSOY
COUNTY OF MORRIS 20/9 before me personally came the above-named Mahesh Raghavan, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth. Seal (Notary Public) OFFICIAL SEAL Joseph Marrone
Notary Public-New Jersey
My Commission Expires
June 21, 2015

v.9.18.12

PATENT

REEL: 034520 FRAME: 0654

Docket No. 33645-10

INVENTOR 2
Signature: <u>Faurence Steven Buch</u> Date: 12/5/14 Lawrence Steven Bach
Witnessed by: Date: DEC 5 2014 Signature
TOHN EFFECTZ Printed Name of Witness
Witnessed by: Date:
Printed Name of Witness
Section Below is for use only if signing in presence of a notary Lawrence Steven Bach Date: 12/8/14
STATE OF N.H. COUNTY OF Rocking ham
This day of,
Seal Jennie James Johnson (Notary Public) Expuris 1-15-19 Justine V Ven au

4

INVENTOR 3	
Signature: Dana Rigg	Date:
Witnessed by: Bott A Polo Signature	Date: 12/10/14
Printed Name of Witness	
Witnessed by: Clot Go Signature Chet Polo	Date: 12/10/14
Printed Name of Witness	
SECTION DELOW IS FOR USE ONLY IF	CICNING IN PRECENCE OF A NOTARY
SECTION BELOW IS FOR USE ONLY IF	SIGNING IN PRESENCE OF A NOTARY
	Date:
Dana Rigg	
STATE OF	
COUNTY OF	
Dana Rigg, to me personally known as the	before me personally came the above-named individual who executed the foregoing assignment, ted the same of his/her own free will for the purposes
Seal	

v.9.18,12

Docket No. 33645-10

:NT

5

(Notary Public)

INVENTOR 4	
Signature: Let Elliott Haynes	Date: 12/10/2014
Witnessed by:Signature	Date:
Printed Name of Witness	_
Witnessed by:Signature	Date:
Printed Name of Witness	<u>-</u>
SECTION BELOW IS FOR USE ONLY IF SI Peter Elliott Haynes	Date: 12/10/20/4
STATE OF California ss.	
reter Elliott Hayries, to the personally knowl	4 before me personally came the above-named in as the individual who executed the foregoing stree executed the same of his/her own free will for
Seal Cil	(Notary Public)
COLIN J. KENN COMM1987 NOTARY PUBLIC CALIF ORANGE COUNT My Term Exp. August	FORNIA I

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Docket No. 33645-10