504107777 11/22/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4154446

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL FLANAGAN	09/04/2015
NICHOLAS JAMES RANDELL	10/31/2015
MOHSEN ZADEH-KOOCHAK	09/14/2015
DAVID CHARLES PADFIELD	09/01/2015
MIHAI STANCIUC	09/14/2015
HOWARD JOHN THOMAS	09/29/2015

RECEIVING PARTY DATA

Name:	JDSU UK LIMITED
Street Address:	SPINNAKER HOUSE, LIME TREE WAY
Internal Address:	HAMPSHIRE INT BUSINESS PARK
City:	CHINEHAM, BASINGSTOKE, HAMPSHIRE,
State/Country:	UNITED KINGDOM
Postal Code:	RG24 8GG

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15276226

CORRESPONDENCE DATA

Fax Number: (571)432-0808

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: 5714320800

Email: rallen@harrityllp.com

Correspondent Name: HARRITY & HARRITY, LLP
Address Line 1: 11350 RANDOM HILLS ROAD

Address Line 2: SUITE 600

Address Line 4: FAIRFAX, VIRGINIA 22030

ATTORNEY DOCKET NUMBER: 0099-0057C1

NAME OF SUBMITTER: TIMOTHY R. HIRZEL

SIGNATURE: /Timothy R. Hirzel, Reg. No. 61,141/

DATE SIGNED: 11/22/2016

504107777 REEL: 040403 FRAME: 0223

Total Attachments: 18 source=0099-0057C1_Assignment_from_parent#page1.tif source=0099-0057C1 Assignment from parent#page2.tif source=0099-0057C1 Assignment from parent#page3.tif source=0099-0057C1_Assignment_from_parent#page4.tif source=0099-0057C1 Assignment from parent#page5.tif source=0099-0057C1 Assignment from parent#page6.tif source=0099-0057C1_Assignment_from_parent#page7.tif source=0099-0057C1_Assignment_from_parent#page8.tif source=0099-0057C1 Assignment from parent#page9.tif source=0099-0057C1 Assignment from parent#page10.tif source=0099-0057C1_Assignment_from_parent#page11.tif source=0099-0057C1 Assignment from parent#page12.tif source=0099-0057C1_Assignment_from_parent#page13.tif source=0099-0057C1 Assignment from parent#page14.tif source=0099-0057C1_Assignment_from_parent#page15.tif source=0099-0057C1_Assignment_from_parent#page16.tif source=0099-0057C1 Assignment from parent#page17.tif source=0099-0057C1 Assignment from parent#page18.tif

PATENT REEL: 040403 FRAME: 0224

THIS ASSIGNMENT, by Michael FLANAGAN, Nicholas James RANDELL, Mohsen ZADEH-KOOCHAK, David Charles PADFIELD, Mihai STANCIUC, and Howard John THOMAS, residing at 9 Cora Lane, Chester, New Jersey, 07930, U.S.A, Oakridge, Blacknest, Alton, Hants, GU34 4PZ, United Kingdom, Bryher, Tile Barn, Wollton Hill, RG20 9UX, United Kingdom, 9 Hawkins Meadow, Marlborough, Wiltshire, SN8 1UR, United Kingdom, Flat 6, Discovery Court, Catherine Road, Newbury, RG14 7NS, United Kingdom, and Whitecroft, Middleyard, Stonehouse, GL10 3QQ, United Kingdom, (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>TECHNIQUES FOR</u> <u>DYNAMIC NETWORK OPTIMIZATION USING GEOLOCATION AND NETWORK MODELING</u> set forth in an application for Letters Patent of the United States,

(1)	which is a provisional application (a) filed herewith; or (b) bearing Application No.	, and filed on; or
(2)	which is a non-provisional application (a) bearing Application No. 14/599, (b) filed herewith; and	814, and filed on <u>January 19, 2015;</u> or

We hereby authorize Applicants' representative to fill in the preceding information relating to the filing date and/or serial number, as appropriate.

WHEREAS, JDSU UK Limited, Spinnaker House, Lime Tree Way, Hampshire Int Business Park, Chineham, Basingstoke, Hampshire, United Kingdom, RG24 8GG, a corporation duly organized under and pursuant to the laws of and having its principal place of business at (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including any previously or subsequently filed provisional applications, for Letters Patent of the United States or other countries claiming priority to said application or from which said application claims priority, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, be it known that for good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, provisional applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

Myell All Michael FLANAGAN Date: 4 Sep 2015	Witness Signature E Jeannine Flanagan Witness Name
Nicholas James RANDELL	Witness Signature
Date:	Witness Name
Mohsen ZADEH-KOOCHAK	Witness Signature
Date:	Witness Name

Joint Assignment Attorney's Docket No.: <u>0099-0057</u>

David Charles PADFIELD	Witness Signature
Date:	Witness Name
Mihai STANCIUC	Witness Signature
Date:	Witness Name
Howard John THOMAS	Witness Signature
Date:	Witness Name

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Michael FLANAGAN	Witness Signature
Date:	Witness Name
Nicholas James RANDELL	Witness Signature
Date: 31/10/15	Witness Name
Mohsen ZADEH-KOOCHAK	Witness Signature
Date:	Witness Name

David Charles PADFIELD	Witness Signature
Date:	Witness Name
Mihai STANCIUC	Witness Signature
Date:	Witness Name
Howard John THOMAS	Witness Signature
Date:	Witness Name

- 3 -

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Michael FLANAGAN	Witness Signature
Date:	Witness Name
Nicholas James RANDELL	Witness Signature
Date:	Witness Name
\sim	
Mohsen ZADEH-KOOCHAK	Witness Signature
Date:14 Stp 15	Witness Name
	witness Name

David Charles PADFIELD	Witness Signature
Date:	Witness Name
Mihai STANCIUC	Witness Signature
Date:	Witness Name
Howard John THOMAS	Witness Signature
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Michael FLANAGAN	Witness Signature
Date:	Witness Name
Nicholas James RANDELL	Witness Signature
Date:	Witness Name
Mohsen ZADEH-KOOCHAK	Witness Signature
Date:	Witness Name

David Charles PADFIELD	Witness Signature
Date: 1 SEP 2015	JURDAN WEIL PULLET
Mihai STANCIUC	Witness Signature
Date:	Witness Name
Howard John THOMAS	Witness Signature
Date:	Witners Nome

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THIS ASSIGNMENT, by Michael FLANAGAN, Nicholas James RANDELL, Mohsen ZADEH-KOOCHAK, David Charles PADFIELD, Mihai STANCIUC, and Howard John THOMAS, residing at 9 Cora Lane, Chester, New Jersey, 07930, U.S.A, Oakridge, Blacknest, Alton, Hants, GU34 4PZ, United Kingdom, Bryher, Tile Barn, Wollton Hill, RG20 9UX, United Kingdom, 9 Hawkins Meadow, Marlborough, Wiltshire, SN8 1UR, United Kingdom, Flat 6, Discovery Court, Catherine Road, Newbury, RG14 7NS, United Kingdom, and Whitecroft, Middleyard, Stonehouse, GL10 3QQ, United Kingdom, (hereinafter referred to as "the Assignors"), respectively, witnesseth:

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Michael FLANAGAN	Witness Signature
Date:	Witness Name /
Nicholas James RANDELL	Witness Signature
Date:	Witness Name
Mohsen ZADEH-KOOCHAK	Witness Signature
Date:	Witness Name

Joint Assignment Attorney's Docket No.: <u>0099-0057</u>

David Charles PADFIELD	Witness Signature
Date:	
	Witness Name
Mihai Stancing	Pu audy Witness Signature
Date: 14.09-2015	RAJ CHOUDHURY Witness Name
Howard John THOMAS	Witness Signature
Date:	Witness Name

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AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Michael FLANAGAN	Witness Signature
Date:	Witness Name
	W Ittless Nathe
Nicholas James RANDELL	Witness Signature
Date:	
	Witness Name
Mohsen ZADEH-KOOCHAK	Witness Signature
Date:	
	Witness Name

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David Charles PADFIELD	Witness Signature
Date:	Witness Name
Mihai STANCIUC	Witness Signature
Date:	Witness Name
Howard John THOMAS	Witness Signature
Date: 29/9/2015	WALTER FFATHERSTONE
	Witness Name