## 505801353 12/03/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5848182

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT
EFFECTIVE DATE:	04/30/2016

### **CONVEYING PARTY DATA**

Name	Execution Date
IEEE GLOBALSPEC, INC.	11/26/2019

### **RECEIVING PARTY DATA**

Name:	THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
Street Address:	3 PARK AVENUE
Internal Address:	17TH FLOOR
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10016-5997

### **PROPERTY NUMBERS Total: 4**

Property Type	Number
Patent Number:	8126877
Patent Number:	7356533
Patent Number:	8205025
Patent Number:	8065283

### **CORRESPONDENCE DATA**

**Fax Number:** (212)953-7201

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:** (212) 415-9200

**Email:** IP.Docket@dorsey.com, quiles.lorraine@dorsey.com

Correspondent Name: DORSEY & WHITNEY LLLP

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Address Line 2: 51 WEST 52ND STREET

Address Line 4: NEW YORK, NEW YORK 10019-6119

ATTORNEY DOCKET NUMBER:	P285348 FAMILY
NAME OF SUBMITTER:	LORRAINE QUILES
SIGNATURE:	/Lorraine Quiles/
DATE SIGNED:	12/03/2019

PATENT 505801353 REEL: 051166 FRAME: 0946

# Total Attachments: 10 source=Confirmatory Assignment 20191203#page1.tif source=Confirmatory Assignment 20191203#page2.tif source=Confirmatory Assignment 20191203#page3.tif source=Confirmatory Assignment 20191203#page4.tif source=Confirmatory Assignment 20191203#page5.tif source=Confirmatory Assignment 20191203#page6.tif source=Confirmatory Assignment 20191203#page7.tif source=Confirmatory Assignment 20191203#page8.tif source=Confirmatory Assignment 20191203#page9.tif source=Confirmatory Assignment 20191203#page9.tif

PATENT REEL: 051166 FRAME: 0947

## CONFIRMATORY PATENT ASSIGNMENT

This Confirmatory Patent Assignment is extended by The Institute of Electrical and Electronics Engineers, a New York not-for-profit corporation, with a principal place of business located at 3 Park Avenue, 17<sup>th</sup> Floor, New York, New York 10016-5997 (the "Assignee"), and IEEE GlobalSpec, Inc., a subsidiary of Assignee, with its office at 201 Fuller Road, Albany, New York 12203 (the "Assignor")(collectively, the "Parties").

WHEREAS, Assignor and Assignee have entered an Intellectual Property Agreement dated April 30, 2016 (the "Intellectual Property Agreement"), under which Assignor has assigned its rights to certain intellectual property to Assignor, including the patents identified in Schedule A hereto.

WHEREAS, Assignor and Assignee desire to confirm said assignment of the property assignment.

NOW THEREFORE, Assignor and Assignee confirm that pursuant to the Intellectual Property Agreement and for good and valuable consideration to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, and transferred and by these presents does hereby sell, assign and transfer to the said Assignee, and said Assignee's legal representatives, successors and assigns, nunc pro tunc effective as of April 30, 2016, any and all of the entire right, title and interest in and to the right, title and interest it may have in the patents identified in Schedule A hereto, and any provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional and convention applications corresponding thereto; any and all patents of the United States and countries and regions foreign thereto which may grant or have granted thereto or be lodged in relation thereto; any reissue or reexamination thereof or to be obtained therefor; any renewals or substitutes thereof; any and all priority rights or priority claims, or International Convention rights; any and all rights to enforce. assert and sue for past, present and future infringement of the patents, and all rights to recover and collect for past, present and future damages related to the patents of the United States and countries and regions foreign thereto, including all rights to injunctive relief, rights to collect royalties, and other remedies of any kind on account of the patents; and any other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto (collectively the 'Patent Rights");

Assignor hereby authorizes and requests the competent authorities to grant and to issue any and all such patents in the United States and throughout the world to the Assignee and the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by Assignor had this sale, conveyance, assignment, and transfer not been made;

Assignor agrees, at any time, upon the request of the Assignee, to execute and to deliver to the Assignee any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any of the patents issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof;

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and further agrees at any time to cooperate with Assignee, and to execute and to deliver upon request of the Assignee such additional documents, if any, as are necessary or desirable, in the prosecution of the patents, and to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do such acts as are necessary to give full effect to and to perfect the rights of the Assignee under this Confirmatory Patent Assignment, including the execution, delivery and procurement of any and all further documents evidencing this sale, conveyance, assignment, and transfer as may be necessary or desirable.

Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

Assignor further represents and covenants that it will, upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings as may be necessary to perfect the Assignee's enjoyment of this grant, and execute acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices.

IN TESTIMONY WHEREOF, the Assignor confirms its assignment on the date and in the place set forth below.

Executed as of this 26 day of Northby 2016

IEEE GLOBALSPEC, INC.,

ASSIGN			
By:	Za Ho	mld_	
Name:	Pete	Horische	

STATE OF New York

COUNTY OF A bany

On this 24 day of November, 2018, before me, a Notary Public, personally appeared Peter free School, to me known and known to me to be the person of that name, who signed the foregoing instrument and acknowledged the same to be his/her free act and deed.

My Commission Expires

FACA OFIAE NOTARY PUBLIC-STATE OF NEW YORK No. 010L6171375 Qualified in Albany County My Commission Expires July 23, 20,7623

Executed as of this	_ day of	2016
		The Institute of Electrical and Electronics Engineers
		ASSIGNEE
		Ву:
		Name:
		Its:
STATE OF	)	
COUNTY OF	)	
On this day or signed the foregoing in	f	2016, before me, a Notary Public, personally appeared known to me to be the person of that name, who wledged the same to be his/her free act and deed.
		Notary Public
My Commission Expire	res de la companya de	

# SCHEDULE A

TITLE	U.S. PATENT NO.	ISSUE DATE
Arranging Search Engine Results	8,126,877	2/28/2012
Database Search In Distributed Computer System On Portion Of Remote	7,356,533	4/08/2008
Efficient Buffered Reading With A Plug-In For Input Buffer Size Determination	8,205,025	6/19/2012
Term Synonym Generation	8,065,283	11/22/2011

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PATENT REEL: 051166 FRAME: 0952

## CONFIRMATORY PATENT ASSIGNMENT

This Confirmatory Patent Assignment is extended by The Institute of Electrical and Electronics Engineers, a New York not-for-profit corporation, with a principal place of business located at 3 Park Avenue, 17th Floor, New York, New York 10016-5997 (the "Assignee"), and IEEE GlobalSpec, Inc., a subsidiary of Assignee, with its office at 201 Fuller Road, Albany, New York 12203 (the "Assignor")(collectively, the "Parties").

WHEREAS, Assignor and Assignee have entered an Intellectual Property Agreement dated April 30, 2016 (the "Intellectual Property Agreement"), under which Assignor has assigned its rights to certain intellectual property to Assignor, including the patents identified in Schedule A hereto.

WHEREAS, Assignor and Assignee desire to confirm said assignment of the property assignment.

NOW THEREFORE, Assignor and Assignee confirm that pursuant to the Intellectual Property Agreement and for good and valuable consideration to Assignor, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold, assigned, and transferred and by these presents does hereby sell, assign and transfer to the said Assignee, and said Assignee's legal representatives, successors and assigns, nunc pro tunc effective as of April 30, 2016, any and all of the entire right, title and interest in and to the right, title and interest it may have in the patents identified in Schedule A hereto, and any provisional, non-provisional, continuation, continuation-in-part, divisional, international, foreign, regional and convention applications corresponding thereto; any and all patents of the United States and countries and regions foreign thereto which may grant or have granted thereto or be lodged in relation thereto; any reissue or reexamination thereof or to be obtained therefor; any renewals or substitutes thereof; any and all priority rights or priority claims, or International Convention rights; any and all rights to enforce, assert and sue for past, present and future infringement of the patents, and all rights to recover and collect for past, present and future damages related to the patents of the United States and countries and regions foreign thereto, including all rights to injunctive relief, rights to collect royalties, and other remedies of any kind on account of the patents; and any other benefits accruing to or to accrue to Assignor with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto (collectively the "Patent Rights");

Assignor hereby authorizes and requests the competent authorities to grant and to issue any and all such patents in the United States and throughout the world to the Assignee and the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by Assignor had this sale, conveyance, assignment, and transfer not been made;

Assignor agrees, at any time, upon the request of the Assignee, to execute and to deliver to the Assignee any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any of the patents issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof;

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and further agrees at any time to cooperate with Assignee, and to execute and to deliver upon request of the Assignee such additional documents, if any, as are necessary or desirable, in the prosecution of the patents, and to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do such acts as are necessary to give full effect to and to perfect the rights of the Assignee under this Confirmatory Patent Assignment, including the execution, delivery and procurement of any and all further documents evidencing this sale, conveyance, assignment, and transfer as may be necessary or desirable.

Assignor represents and warrants that Assignor has the right, title, and authority to execute this Assignment and to convey any and all right, title, and interest in the Patent Rights, and that Assignor has not conveyed nor will convey hereafter all or part of the Patent Rights to a third party;

Assignor further represents and covenants that it will, upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings as may be necessary to perfect the Assignee's enjoyment of this grant, and execute acknowledgments of this assignment as necessary for full enjoyment of the Patent Rights and for recording in foreign patent offices.

IN TESTIMONY WHEREOF, the Assignor confirms its assignment on the date and in the place set forth below.

Executed as of this _	day of	2019
IEEE GLOBALSPE	C, INC.,	
ASSIGNOR		
Name:		
Title:		
Date:		
STATE OF	)	
COUNTY OF	<i>)</i>	
On thisday	of, to me known	_, 2019, before me, a Notary Public, personally appeared and known to me to be the person of that name, who
signed the foregoing	instrument and ack	and known to me to be the person of that name, who nowledged the same to be his/her free act and deed.
		Notary Public
My Commission Eva	***************************************	

# Executed as of this 27th day of November 2019

The Institute of Electrical ar	id Electronics Engi	neers, Incorpora	ted.	
ASSIGNEE				
Name: Jonathan Wiggins				
Title: Senior Intellectual Pro	perty Attorney and	Chief Privacy (	Officer	
Date: November 27, 2019			*********	
STATE OF	)			
COUNTY OF	) )			
On this <u>27</u> day of <u>N</u> Sonathan Wiggins to 1  signed the foregoing instrum	me known and know	wn to me to be tl	he person of that	name, who
	N.	otary Public	"// <i>&amp;</i> ~	;
January 22, 2023 My Commission Expires			<b>.</b>	
DAVID MEZA Notary Public, State of New York Registration #01ME8053998 Qualified In New York County Commission Expires Jan. 22, 2023				

# SCHEDULE A

TITLE	U.S. PATENT No.	Issue DATE
Arranging Search Engine Results	8,126,877	2/28/2012
Database Search In Distributed Computer System On Portion Of Remote	7,356,533	4/08/2008
Efficient Buffered Reading With A Plug-In For Input Buffer Size Determination	8,205,025	6/19/2012
Ferm Synonym Generation	8,065,283	11/22/2011

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PATENT REEL: 051166 FRAME: 0957