PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2865007

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT		
	Corrective Assignment to correct the ASSIGNEE NAME previously recorded on Reel 029921 Frame 0237. Assignor(s) hereby confirms the ASSIGNMENT.		

CONVEYING PARTY DATA

Name	Execution Date
JEAN PATY	01/31/2013
CHAD GWALTNEY	01/30/2013
ALAN SHIELDS	01/30/2013
BRIAN TIPLADY	02/05/2013

RECEIVING PARTY DATA

Name:	INVIVODATA, INC.
Street Address:	2100 WHARTON STREET
Internal Address:	SUITE 505
City:	PITTSBURG
State/Country:	PENNSYLVANIA
Postal Code:	15203

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13670151

CORRESPONDENCE DATA

Fax Number: (650)493-6811

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: 6504939300

Email: patentdocket@wsgr.com

Correspondent Name: WILSON SONSINI GOODRICH & ROSATI

Address Line 1: 650 PAGE MILL ROAD

Address Line 4: PALO ALTO, CALIFORNIA 94304-1050

ATTORNEY DOCKET NUMBER:	31886-708.401
NAME OF SUBMITTER:	JAIME OWENS
SIGNATURE:	/Jaime Owens/
DATE SIGNED:	05/21/2014

Total Attachments: 4

PATENT REEL: 032974 FRAME: 0656

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PATENT REEL: 032974 FRAME: 0657

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Jean Paty	01/31/2013
Alan Shields	01/30/2013
Chad Gwaltney	01/30/2013
Brian Tiplady	02/05/2013

RECEIVING PARTY DATA

Name:	invivodata
Street Address:	2100 Wharton Street
Internal Address:	Suite 505
City:	Pittsburgh
State/Country:	PENNSYLVANIA
Postal Code:	15203

PROPERTY NUMBERS Total: 1

Property Type			
Application Number:	13670151		

CORRESPONDENCE DATA

Fax Number: 6504936811

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 650-493-9300

Email: patentdocket@wsgr.com

Correspondent Name: Wilson Sonsini Goodrich & Rosati

Address Line 1: 650 Page Mill Road

Address Line 4: Palo Alto, CALIFORNIA 94304-1050

ATTORNEY DOCKET NUMBER: 31886-708.301

NAME OF SUBMITTER: Monica Franklin

Total Attachments: 3

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PATENT REEL: 032974 FRAME: 0658

Haranger attracted at State Haranda (PATENT ASSIGNMENT	regio professore ou arment de la limita de la comita de la	Docket Number 31886-708.301
WHEREAS, the undersigned:	A CONTRACTOR OF THE CONTRACTOR		
1. PATY, Jean Pittsburg, PA 15217 US	SHIELDS, Alan Johnson City, TN 37604 US	 GWALTNEY, Chad Westerly, RI 02891 U 	4. TIPLADY, Brian S Edinburgh EH10 6AU UK
(hereinafter "Inventor(s))," have inv	ented certain new and useful improvement	ents in LOPMENT PROCESS	
for which Application for which Application for which Application for which an application (hereinafter "Application(s)").	and spatent application is executed on even No. 13/670.151 was filed on November in Nowas filed on in the U.S. Ren Nowas filed on in thePate ion was filed upon which a United State.	r 6, 2012 in the United States ceiving Office of the Parent Cont Office; and/or, s Patent issued on as U.S.	cooperation i reaty; . Patent No.
(hereinafter "Assignee"), is desirous and to all embodiments of the inven collectively referred to as "Invention thereon granted in the United States	s of acquiring the entire right, title and in tions, heretofore conceived, made or dis ns"), and in and to any and all patents, in , foreign countries, or under any internal	terest in and to said Applicat covered, whether jointly or si yentor's certificates and othe lional convention, agreement,	
NOW, THEREFORE, in said Assignee:	consideration of good and valuable cons	ideration acknowledged by s	aid Inventor(s) to have been received in full from
Inventions, including the right to old applications and Patent(s), including otherwise; (c) in and to any and all under any international convention, application which is a divisional, su reexamination, or extensions of any 2 Said Inventor(aim priority to said Inventions; (b) in and gitiose filed under the Paris Convention applications filed and any and all Patent agreement, protocol, or treaty, including ibstitution, continuation, or continuation of said Patent(s). s) hereby covenant and agree to cooperative in the line of States, foreign countries.	I to all rights to all United Sta for the Protection of Industri s) granted on said Inventions geach and every application in-part of any of said Applic to with said Assignee to enables, or under any international	intire right, title and interest (a) in and to said interest and corresponding non-United States patient all Property. The Patent Cooperation Treaty or in the United States, in any foreign country, or filed and any and all Patent(s) granted on any ation(s); and (d) in and to each and every reissue, ile said Assignee to enjoy to the fullest extent the convention, agreement, protocol, or treaty. Such
specifications, declarations or other Assignee the right, title and interest divisional, continuing or additional (e) for interference or other priority therefor and any Patent(s) granted t priority contests, public use proceed providing such cooperation shall be	papers, and other assistance all to the ex- herein conveyed; (b) for prosecuting an applications covering said Inventions; (c) proceedings involving said Inventions; hereon, including without limitation reis dings, infringement actions and court act paid for by said Assignee.	tent deemed necessary or de y applications covering said d) for filing and prosecuting a and (f) for legal proceedings sues and reexaminations, opp ions; provided, however, that	of testimony, execution of petitions, oaths, sirable by said Assignee (a) for perfecting in said Inventions; (c) for filing and prosecuting substitute, applications for reissuance of any said Patent(s); involving said Inventions and any applications position proceedings, cancellation proceedings, the expense incurred by said Inventor(s) in
representatives, and shall be binding	g upon said Inventor(s), their respective	heirs, legal representatives ar	•
4. Said Inventor(understanding in conflict herewith.		y have not entered and will no	ot enter into any assignment, contract, or
agreement, protocol, or treaty, be is representatives and assigns.	sued in the name of the Assignee, or its	successors and assigns, for the	ign countries, or under any international convention, the sole use of said Assignce, its successors, legal
IN WITNESS WHEREC	OF, said Inventor(s) have executed and d	elivered this instrument to sa	id Assignee as of the dates written below:
Date: 31 Jan 2013 Jean Pa	ry T	Date: 30 Ja 2013	Chart Gwaltney
Date: Alan Sf	hields	Date:	Brian Tiplady
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· .	PATENT ASSIGNMENT		Docket Number 31886-708.301			
WHEREAS, the undersigned:						
1. PATY, Jean Pittsburg, PA 15217 US	2. SHIELDS, Alan Johnson City, TN 37604 US	 GWALTNEY, Chad Westerly, RI 02891 U 	4. TTPLADY, Brian Edinburgh EH10 6AU UK			
(hereinafter "Inventor(s))," have in	vented certain new and useful improvement	ents in				
	ENDPOINT DEVE	LOPMENT PROCESS				
for which Application for which Application for which Application for which Application	☐ for which a United States patent application is executed on even date herewith; ☐ for which Application No. 13/670.151 was filed on November 6, 2012 in the United States Patent Office; ☐ for which Application No was filed on in the U.S. Receiving Office of the Patent Cooperation Treaty; ☐ for which Application No was filed on in the Patent Office; and/or ☐ for which an application was filed upon which a United States Patent issued on, as U.S. Patent No. (hereinafter "Application(s)").					
WHEREAS, Invivodata, Inc., a corporation of the State of Delaware, having a place of business at 2100 Wharton Street, Suite 505, Pittsburgh, PA 15203, (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said Application(s) and the inventions disclosed therein, and in and to all embodiments of the inventions, heretofore conceived, made or discovered, whether jointly or severally, by said Inventor(s) (hereinafter collectively referred to as "Inventions"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter "Patent(s)") thereon granted in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty.						
NOW, THEREFORE, in said Assignee;	consideration of good and valuable cons	sideration acknowledged by sa	nid Inventor(s) to have been received in full from			
l. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions, including the right to claim priority to said Inventions; (b) in and to all rights to all United States and corresponding non-United States patent applications and Patent(s), including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise; (c) in and to any and all applications filed and any and all Patent(s) granted on said Inventions in the United States, in any foreign country, or under any international convention, agreement, protocol, or treaty, including each and every application filed and any and all Patent(s) granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); and (d) in and to each and every reissue, reexamination, or extensions of any of said Patent(s).						
right, title and interest herein convectooperation by said Inventor(s) shall specifications, declarations or other Assignee the right, title and interest divisional, continuing or additional (e) for interference or other priority therefor and any Patent(s) granted the	yed in the United States, foreign countried include prompt production of pertinent papers, and other assistance all to the exherein conveyed; (b) for prosecuting any applications covering said Inventions; (c) proceedings involving said Inventions; a tereon, including without limitation reist lings, infringement actions and court actions.	es, or under any international of facts and documents, giving tent deemed necessary or design applications covering said It to for filing and prosecuting a tent (f) for legal proceedings it to get and reexaminations, oppositions are sent to the fact that the fact th	e said Assignee to enjoy to the fullest extent the convention, agreement, protocol, or treaty. Such of testimony, execution of petitions, oaths, trable by said Assignee (a) for perfecting in said eventions; (c) for filing and prosecuting substitute, polications for reissuance of any said Patent(s); twolving said Inventions and any applications solved in proceedings, cancellation proceedings, the expense incurred by said Inventor(s) in			
3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns.						
4. Said Inventor(s) hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.						
5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal representatives and assigns.						
IN WITNESS WHEREO	F, said Inventor(s) have executed and de	livered this instrument to said	Assignee as of the dates written below:			
D. C.						
Date: Jean Pat	y	Date:	Chad Gwaltney			
Date: 150 15 Akin Shi	-2 / · A	Date:	Brian Tiplady			

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Page 1 of 1

<u>A oli pilitiki oto ssilika a sadika sista a</u>	PATENT ASSIGNMENT		Docket Number 31886-708.301	
WHEREAS, the undersigned: 1. PATY, Jean 2. SHIELDS, Alan 3 GWALTNEY, Chad 4. TIPLADY, Brian Pittsburg, PA 15217 US Johnson City, TN 37604 US Westerly, RI 02891 US Edinburgh EH10 6AU UK (hereinafter "Inventor(s))," have invented certain new and useful improvements in				
for which Application (hereinafter "Application(s)" WHEREAS, Invivodata, Inc. (hereinafter "Assignee"), is conducted to all embodiments of the collectively referred to as "In thereon granted in the United	nited States patent application is executed on of initiation No. 13/670.151 was filed on Novembellication Nowas filed on in the U.S. Resilication Nowas filed on in thePa application was filed upon which a United State.). a corporation of the State of Delaware, having the entire right, title and e inventions, heretofore conceived, made or diventions"), and in and to any and all patents, I States, foreign countries, or under any internal	ner 6, 2012 in the United States Receiving Office of the Patent tent Office; and/or tes Patent issued on as U.S ag a place of business at 2100 interest in and to said Applicat iscovered, whether jointly or s inventor's certificates and othe ational convention, agreement	Cooperation Treaty; S. Patent No. Wharton Street, Suite 505, Pittsburgh, PA 15203, tion(s) and the inventions disclosed therein, and in everally, by said Inventor(s) (hereinafter or forms of protection (hereinafter "Patent(s)"), protocol, or treaty.	
NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventor(s) to have been received in full from said Assignee: 1. Said Inventor(s) do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions, including the right to claim priority to said Inventions; (b) in and to all rights to all United States and corresponding non-United States patent applications and Patent(s), including those filed under the Paris Convention for the Protection of Industrial Property. The Patent Cooperation Treaty or otherwise; (c) in and to any and all applications filed and any and all Patent(s) granted on said Inventions in the United States, in any foreign country, or under any international convention, agreement, protocol, or treaty, including each and every application filed and any and all Patent(s) granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); and (d) in and to each and every reissue, reexamination, or extensions of any of said Patent(s).				
right, title and interest herein cooperation by said Inventors specifications, declarations of Assignee the right, title and it divisional, continuing or add (c) for interference or other patients of and any Patent(s) gra- priority contests, public use priority contests, public use priority	conveyed in the United States, foreign countr (s) shall include prompt production of pertiner rother papers, and other assistance all to the enterest herein conveyed; (b) for prosecuting a itional applications covering said Inventions; priority proceedings involving said Inventions;	ies, or under any international it facts and deciments, giving extent decimed necessary or demy applications covering said I (d) for filing and prosecuting a and (f) for legal proceedings suces and reexaminations, opposite the proceedings of the covering and the covering suces and reexaminations, opposite the covering of the covering suces and reexaminations, opposite the covering of the coverin	sirable by said Assignee (a) for perfecting in said inventions; (c) for filing and prosecuting substitute, applications for reissuance of any said Patent(s); involving said Inventions and any applications position proceedings, cancellation proceedings,	
 The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventor(s), their respective heirs, legal representatives and assigns. Said Inventor(s) hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or 				
5. Said Inventor(s) hereby request that any Patent(s) issuing in the United States, foreign countries, or under any international convention, agreement, protocol, or treaty, be issued in the name of the Assignee, or its successors and assigns, for the sole use of said Assignee, its successors, legal representatives and assigns. IN WITNESS WHEREOF, said Inventor(s) have executed and delivered this instrument to said Assignee as of the dates written below:				
Date:	an Paty	Date:	Chad Gwaltney	
Date: A	lan Shields	Date: <u>5 Feb 20</u> 13	Brian Tiplady	

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RECORDED: 05/21/2014

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