502849339 06/12/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2895936

Name TRUVEN HEALTH ANALYTICS, INC. (1) RECEIVING PARTY DATA Name: JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE A Street Address: 10 S. DEARBORN Internal Address: 7TH FLOOR City: CHICAGO State/Country: ILLINOIS Postal Code: 60603 PROPERTY NUMBERS Total: 4 Property Type Mamber 12228882 Application Number: 14016346 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: (212) 455-2502 Phone: (212) 455-3011 Email: (212) 455-3011 Email: (212) 455-3011 Email:	SECURITY INTEREST		
TRUVEN HEALTH ANALYTICS, INC. (RECEIVING PARTY DATA			
RECEIVING PARTY DATA Name: JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE A Street Address: 10 S. DEARBORN internal Address: 7TH FLOOR City: CHICAGO State/Country: ILLINOIS Postal Code: 60603 PROPERTY NUMBERS Total: 4 Property Type PROPERTY NUMBERS Total: 4 Property Type Application Number: 12228882 Application Number: 141016346 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it using a fax number, if provided; if that is unsuccessful, it will be sent via US Ma Phone: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it using a fax number, if provided; if that is unsuccessful, it will be sent via US Ma Phone: (212)455-2502 Correspondent Name: ALEXANDER KEY Address Line 1: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333	Execution Date		
Name: JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE A Street Address: 10 S. DEARBORN Internal Address: 7TH FLOOR City: CHICAGO State/Country: ILLINOIS Postal Code: 60603 Property Type Number Application Number: 12228882 Application Number: 14016346 Application Number: 12173603 CORRESPONDENCE DATA Fax Number: Correspondence will be sent to the e-mail address first; if that is unsuccessful, using a fax number, if provided; if that is unsuccessful, it will be sent via US Ma Phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014	06/10/2014		
Street Address: 10 S. DEARBORN Internal Address: 7TH FLOOR City: CHICAGO State/Country: ILLINOIS Postal Code: 60603 Property Type Number Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Ma Phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 1: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014			
Internal Address: 7TH FLOOR City: CHICAGO State/Country: ILLINOIS Postal Code: 60603 Property Type Number Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Ma Phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 1: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014	JPMORGAN CHASE BANK, N.A., AS ADMINISTRATIVE AGENT		
City: CHICAGO State/Country: ILLINOIS Postal Code: 60603 Property Type 60603 Property Type Number Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Maing a fax number, if provided; if that is unsuccessful, it will be sent via US Maing a fax number, if provided; if that is unsuccessful, it will be sent via US Maing a fax number, if provided; if that is unsuccessful, it will be sent via US Maing a fax number, if provided; if that is unsuccessful, it will be sent via US Maing a fax number, if provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessful, it will be sent via US Maing a fax number is provided; if that is unsuccessfu			
State/Country: ILLINOIS Postal Code: 60603 PROPERTY NUMBERS Total: 4 Property Type Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Ma Phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 1: S0933/0216 Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 50933/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014			
Postal Code: 60603 PROPERTY NUMBERS Total: 4 Property Type Number Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: (212)455-2502 CORRESPONDENCE DATA Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it using a fax number, if provided; if that is unsuccessful, it will be sent via US Material address line 1; imull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 50933/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014			
PROPERTY NUMBERS Total: 4 Property Type Number Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: (212)455-2502 CORRESPONDENCE DATA Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Main using a fax number, if provided; if that is unsuccessful, it will be sent via US Main using a fax number, if provided; if that is unsuccessful, it will be sent via US Main using a fax number. Phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014			
Property TypeNumberApplication Number:12228882Application Number:14016346Application Number:14146360Application Number:12773603CORRESPONDENCE DATAFax Number:(212)455-2502CORRESPONDENCE DATAFax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mailusing a fax number, if provided; if that is unsuccessful, it will be sent via US MailPhone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Property TypeNumberApplication Number:12228882Application Number:14016346Application Number:14146360Application Number:12773603CORRESPONDENCE DATAFax Number:(212)455-2502CORRESPONDENCE DATAFax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mailusing a fax number, if provided; if that is unsuccessful, it will be sent via US MailPhone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Application Number: 12228882 Application Number: 14016346 Application Number: 14146360 Application Number: 12773603 CORRESPONDENCE DATA Fax Number: Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail Phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014			
Application Number:14016346Application Number:14146360Application Number:12773603CORRESPONDENCE DATAFax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it using a fax number, if provided; if that is unsuccessful, it will be sent via US MailPhone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Application Number:14146360Application Number:12773603CORRESPONDENCE DATAFax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it using a fax number, if provided; if that is unsuccessful, it will be sent via US Marphone:Phone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Application Number:12773603CORRESPONDENCE DATAFax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail Phone:Phone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
CORRESPONDENCE DATA Fax Number: (212)455-2502 Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Main phone: (212) 455-3011 Email: jmull@stblaw.com Correspondent Name: ALEXANDER KEY Address Line 1: 425 LEXINGTON AVENUE Address Line 4: NEW YORK, NEW YORK 10017 TTORNEY DOCKET NUMBER: 509333/0216 AME OF SUBMITTER: J. JASON MULL IGNATURE: /J. Jason Mull/ ATE SIGNED: 06/12/2014			
Fax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US MailUsing a fax number, if provided; if that is unsuccessful, it will be sent via US MailPhone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Fax Number:(212)455-2502Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US MailUsing a fax number, if provided; if that is unsuccessful, it will be sent via US MailPhone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
using a fax number, if provided; if that is unsuccessful, it will be sent via US MatPhone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Phone:(212) 455-3011Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Email:jmull@stblaw.comCorrespondent Name:ALEXANDER KEYAddress Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014	111.		
Address Line 1:425 LEXINGTON AVENUEAddress Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
Address Line 4:NEW YORK, NEW YORK 10017TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014	ALEXANDER KEY		
TTORNEY DOCKET NUMBER:509333/0216AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
AME OF SUBMITTER:J. JASON MULLIGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
IGNATURE:/J. Jason Mull/ATE SIGNED:06/12/2014			
ATE SIGNED: 06/12/2014			
otal Attachments: 5			
burce=(15896083)_(1)_Patent - Truven Health Analytics#page1.tif			
ource=(15896083)_(1)_Patent - Truven Health Analytics#page2.tif	PATENT		

source=(15896083)_(1)_Patent - Truven Health Analytics#page3.tif
source=(15896083)_(1)_Patent - Truven Health Analytics#page4.tif
source=(15896083)_(1)_Patent - Truven Health Analytics#page5.tif

GRANT OF SECURITY INTEREST IN PATENT RIGHTS

This GRANT OF SECURITY INTEREST IN PATENT RIGHTS ("<u>Agreement</u>"), effective as of June 10, 2014 is made by Truven Health Analytics, Inc., a Delaware corporation (the "<u>Grantor</u>"), in favor of JPMorgan Chase Bank, N.A., as Administrative Agent (in such capacity, the "<u>Administrative Agent</u>") for the banks and other financial institutions or entities (the "<u>Lenders</u>") from time to time parties to the Credit Agreement, dated as of June 6, 2012 (as amended, replaced, restated, supplemented or otherwise modified from time to time, including pursuant to the First Amendment, dated as of October 3, 2012, the Second Amendment, dated as of April 26, 2013 and the Third Amendment, dated as of April 11, 2014) (the "<u>Credit Agreement</u>"), among Truven Holding Corp. (formerly known as VCPH Holding Corp.) ("<u>Holdings</u>"), Truven Health Analytics, Inc., (formerly known as Thomson Reuters (Healthcare) Inc., the "<u>Borrower</u>"), the Lenders and the Administrative Agent.

WITNESSETH:

WHEREAS, pursuant to the Credit Agreement, the Lenders have severally agreed to make extensions of credit to the Borrower upon the terms and subject to the conditions set forth therein; and

WHEREAS, in connection with the Credit Agreement, the Grantors have executed and delivered the Guarantee and Collateral Agreement, dated as of June 6, 2012, in favor of the Administrative Agent (together with all amendments and modifications, if any, from time to time thereafter made thereto, the "Security Agreement");

WHEREAS, pursuant to the Security Agreement, the Grantor pledged and granted to the Administrative Agent for the benefit of the Secured Parties a continuing security interest in all of Grantor's right, title and interest in and to intellectual property owned by such Grantor, including the Patents set forth on <u>Schedule A</u> hereto; and

WHEREAS, the Grantor has duly authorized the execution, delivery and performance of this Agreement;

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and in order to induce the Lenders to make extensions of credit to the Borrower pursuant to the Credit Agreement, the Grantor agrees, for the benefit of the Agent and the Secured Parties, as follows:

SECTION 1. <u>Definitions</u>. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided or provided by reference in the Credit Agreement and the Security Agreement.

SECTION 2. <u>Grant of Security Interest</u>. The Grantor hereby pledges and grants a continuing security interest in, and a right of setoff against, and agrees to assign, transfer and convey, upon demand made upon the occurrence and during the continuance of an Event of Default without requiring further action by either party and to be effective upon such demand, all of the Grantor's right, title and interest in, to and under the Patents set forth on Schedule A hereto (collectively, the "<u>Collateral</u>"), to the Administrative Agent for the benefit of the Administrative Agent and the Secured Parties to secure payment, performance and observance of the Obligations.

PATENT REEL: 033136 FRAME: 0026 SECTION 3. <u>Purpose</u>. This Agreement has been executed and delivered by the Grantor for the purpose of recording the grant of security interest herein with the United States Patent and Trademark Office. The security interest granted hereby has been granted to the Secured Parties in connection with the Security Agreement and is expressly subject to the terms and conditions thereof. The Security Agreement (and all rights and remedies of the Secured Parties thereunder) shall remain in full force and effect in accordance with its terms.

SECTION 4. <u>Acknowledgment</u>. Grantor does hereby further acknowledge and affirm that the rights and remedies of the Secured Parties with respect to the security interest in the Collateral granted hereby are more fully set forth in the Credit Agreement and the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 5. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together constitute one and the same original.

(Remainder of the page intentionally left blank)

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the day and year first above written.

TRUVEN HEALTH ANALYTICS INC. as Grantor

By:____

Name: Phil Buckingham Title: Chief Financial Officer Date:

[Signature Page to Grant of Security Interest in Patent Rights]

PATENT REEL: 033136 FRAME: 0028

JPMORGAN CHASE BANK, N.A.,

as Administrative Agent for the Secured Parties

By:

Name: Title: Date:

Vanessa Chiu Executive Director

[Signature Page to Patent Security Agreement]

PATENT REEL: 033136 FRAME: 0029

SCHEDULE A

U.S. Patent Registrations

None.

U.S. Patent Applications

Owner	Title	Application No.
Truven Health Analytics, Inc.	Systems, Methods, and Software	12/228,882
	for Estimating Patient Treatment	, ,
	Costs	
Truven Health Analytics, Inc.	Method and System for	14/016,346
	Extracting Medical Information	
	for Presentation to Medical	
	Providers on Mobile Terminals	
Truven Health Analytics, Inc.	Systems, Methods, and Software	14/146,360
	for Forecasting Medical	
	Treatment Risks and Costs Based	
	on Illness Severity and Patient	
	Illness Burden	
Truven Health Analytics, Inc.	Internet Delivery System	12/773,603