

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4710194

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	FIRST LIEN SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
ANCESTRY.COM DNA, LLC	11/28/2017
ANCESTRY.COM OPERATIONS INC.	11/28/2017
RECEIVING PARTY DATA	
Name:	JPMORGAN CHASE BANK, N.A., AS COLLATERAL AGENT
Street Address:	10 S. DEARBORN, 7TH FLOOR
Internal Address:	MAILCODE: IL1-1625
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60603
PROPERTY NUMBERS Total: 21	
Property Type	Number
Application Number:	15458549
Application Number:	15519099
Application Number:	15519104
Application Number:	15519105
Application Number:	15451781
Application Number:	15392997
Application Number:	15393008
Application Number:	15393637
Application Number:	15393665
Application Number:	15479291
Application Number:	15524612
Application Number:	15593854
Application Number:	29606611
Application Number:	29607734
Application Number:	62471852
Application Number:	62476204
Application Number:	62515435
Application Number:	62544565

PATENT

Property Type	Number
Application Number:	62567454
Application Number:	62569082
Application Number:	62576462

CORRESPONDENCE DATA

Fax Number: (800)914-4240

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: 800-713-0755

Email: Michael.Violet@wolterskluwer.com

Correspondent Name: CT CORPORATION

Address Line 1: 4400 EASTON COMMONS WAY

Address Line 2: SUITE 125

Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	ELAINE CARRERA
SIGNATURE:	/Elaine Carrera/
DATE SIGNED:	11/30/2017

Total Attachments: 6

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**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Ancestry.com DNA, LLC
Ancestry.com Operations Inc.

2. Name and address of receiving party(ies)

Name: JPMorgan Chase Bank, N.A., as Collateral Agent

Internal Address: _____

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) November 28, 2017

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☒ Other First Lien Security Agreement

Street Address: 10 S. Dearborn, 7th Floor,

Mailcode: IL1-1625

City: Chicago

State: IL

Country: USA Zip: 60603

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

See Schedule I

B. Patent No.(s)

See Schedule I

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Elaine Carrera, Legal Assistant

Internal Address: _____

Street Address: c/o Cahill Gordon & Reindel LLP

80 Pine Street

City: New York

State: NY Zip: 10005

Phone Number: (212) 701-3365

Docket Number: _____

Email Address: ecarrera@cahill.com

6. Total number of applications and patents involved: 21

7. Total fee (37 CFR 1.21(h) & 3.41) \$ _____

- ☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized User Name _____

9. Signature:

Elaine Carrera
Signature

November 28, 2017
Date

Elaine Carrera

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

6

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

FIRST LIEN PATENT SECURITY AGREEMENT, dated as of November 28, 2017 (this "Agreement"), among the Grantors named on the signature page hereto (each, a "Grantor" and collectively, the "Grantors") and JPMORGAN CHASE BANK, N.A., as Collateral Agent (in such capacity and together with successors in such capacity, the "Collateral Agent").

Reference is made to (a) the First Lien Credit Agreement dated as of October 19, 2016 (as amended, supplemented or otherwise modified from time to time, the "Credit Agreement"), Ancestry.com LLC ("Holdings"), Ancestry US Holdings Inc. ("Intermediate Holdings II"), Ancestry.com Inc. ("Intermediate Holdings I"), Ancestry.com Operations Inc. (the "Borrower"), the Lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent, and (b) the First Lien Collateral Agreement, dated as of October 19, 2016 (as amended, supplemented or otherwise modified from time to time, the "Collateral Agreement"), among Holdings, Intermediate Holdings II, Intermediate Holdings I, the Borrower, the other grantors from time to time party thereto and the Collateral Agent. The Lenders and the Issuing Banks have agreed to extend credit to the Borrower subject to the terms and conditions set forth in the Credit Agreement. Each Grantor is the Borrower or an affiliate of the Borrower, will derive substantial benefits from the extension of credit to the Borrower pursuant to the Credit Agreement and is willing to execute and deliver this Agreement in order to induce the Lenders and the Issuing Banks to extend such credit. Accordingly, the parties hereto agree as follows:

SECTION 1. Terms. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the Collateral Agreement or the Credit Agreement, as applicable. The rules of construction specified in Section 1.01(b) of the Collateral Agreement also apply to this Agreement.

SECTION 2. Grant of Security Interest. As security for the payment or performance, as the case may be, in full of all Secured Obligations, each Grantor hereby pledges to the Collateral Agent, its successors and assigns, for the benefit of the Secured Parties and hereby grants to the Collateral Agent, its successor and assigns, for the benefit of the Secured Parties a security interest (the "Security Interest") in all of such Grantor's right, title and interest in, to and under the Patents listed on Schedule I attached hereto (the "Patent Collateral").

SECTION 3. Collateral Agreement. The Security Interest granted to the Collateral Agent herein is granted in furtherance, and not in limitation, of the security interests granted to the Collateral Agent pursuant to the Collateral Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the Patent Collateral are more fully set forth in the Collateral Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the Collateral Agreement, the terms of the Collateral Agreement shall govern.

SECTION 4. Counterparts. This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original but all of which when taken together shall constitute a single contract. Delivery of an

executed signature page to this Agreement by facsimile or other electronic transmission shall be effective as delivery of a manually signed counterpart of this Agreement.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement
as of the day and year first above written.

ANCESTRY.COM DNA, LLC,

By: 
Name: Howard Hochhauser
Title: Chief Financial Officer and Vice President

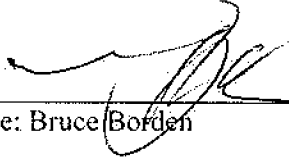
ANCESTRY.COM OPERATIONS INC.

By: 
Name: Howard Hochhauser
Title: Chief Financial Officer and President

Acknowledged by:

JPMORGAN CHASE BANK, N.A., as Collateral
Agent;

By:


Name: Bruce Borden

Schedule I

U.S. Patents and Applications:

	Assignee	Patent Title	Serial No. Filing Date	Patent No. Issue Date
1.	Ancestry.com DNA, LLC	Discovering Population Structure from Patterns of Identity-By-Descent	15458549 03/14/2017	
2.	Ancestry.com DNA, LLC	Haplotype phasing models	15519099 04/13/2017	
3.	Ancestry.com DNA, LLC	Reducing error in predicted genetic relationships	15519104 04/13/2017	
4.	Ancestry.com DNA, LLC	Ancestral human genomes	15519105 04/13/2017	
5.	Ancestry.com Operations Inc.	System and method for transcribing handwritten records using word grouping with assigned centroids	15451781 03/07/2017	9792520 10/17/2017
6.	Ancestry.com Operations Inc.	2d multi-coordinate adaptive dynamics programming method for robust document registration	15392997 12/28/2016	
7.	Ancestry.com Operations Inc.	Clustering historical images using a convolutional neural net and labeled data bootstrapping	15393008 12/28/2016	
8.	Ancestry.com Operations Inc.	Optimization of first set of ordered items and delayed non-duplicated work queue	15393637 12/29/2016	
9.	Ancestry.com Operations Inc.	Dynamically-qualified aggregate relationship system in genealogical databases	15393665 12/29/2016	
10.	Ancestry.com Operations Inc.	Machine-learning system and method for identifying same person in genealogical databases	15479291 04/05/2017	
11.	Ancestry.com DNA, LLC	Predicting Health Outcomes	15524612 05/06/2017	
12.	Ancestry.com Operations Inc.	System and method for determining that two data records relate to the same subject	15593854 05/12/2017	
13.	Ancestry.com DNA, LLC	Genertics Communities (Design)	29606611 06/06/2017	
14.	Ancestry.com DNA, LLC	Ethnicities (Design)	29607734 06/15/2017	
15.	Ancestry.com DNA, LLC	Sample collection device and sample collection method	62471852 03/15/2017	
16.	Ancestry.com DNA, LLC	Sample collection device and sample collection method	62476204 03/24/2017	
17.	Ancestry.com DNA, LLC	Customized coordinate Ascent for Ranking in Genealogy	62515435 06/05/2017	
18.	Ancestry.com DNA, LLC	A Metric for Diversity Evaluation in Genealogy Search	62544565 08/11/2017	
19.	Ancestry.com DNA, LLC	Characterizing Heterogeneity within Fine-scale Population Structure	62567454 10/03/2017	
20.	Ancestry.com DNA, LLC	Systems, Devices, and Methods for Sample Collection	62569082 10/06/2017	
21.	Ancestry.com Operations Inc.	Genealogical entity resolution system and method	62576462 10/24/2017	