# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3508534

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

# **CONVEYING PARTY DATA**

Name	Execution Date
ANCESTRY.COM OPERATIONS INC.	08/28/2015
IARCHIVES, INC.	08/28/2015
ANCESTRY.COM DNA, LLC	08/28/2015

### **RECEIVING PARTY DATA**

Name:	MORGAN STANLEY SENIOR FUNDING, INC., AS COLLATERAL AGENT
Street Address:	1300 THAMES STREET, 4TH FLOOR THAMES STREET WHARF
City:	BALTIMORE
State/Country:	MARYLAND
Postal Code:	21231

# **PROPERTY NUMBERS Total: 66**

Property Type	Number
Application Number:	13440754
Patent Number:	7240062
Patent Number:	7111144
Patent Number:	7392268
Patent Number:	8019719
Patent Number:	8375286
Patent Number:	8095567
Patent Number:	8768970
Patent Number:	7249129
Patent Number:	7870139
Patent Number:	7724981
Patent Number:	7908315
Patent Number:	7756289
Patent Number:	7734092
Patent Number:	8446652
Patent Number:	7945116
Patent Number:	8073285
Patent Number:	8249391

PATENT REEL: 036519 FRAME: 0853

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Property Type	Number
Patent Number:	8370759
Application Number:	13733045
Patent Number:	8600152
Patent Number:	8356023
Patent Number:	8224821
Patent Number:	8825705
Patent Number:	8185557
Application Number:	12647767
Application Number:	12691571
Patent Number:	8140512
Patent Number:	8600980
Application Number:	13035816
Patent Number:	8786603
Patent Number:	8793574
Patent Number:	8894027
Patent Number:	8801201
Patent Number:	8731336
Patent Number:	8769438
Patent Number:	8825709
Patent Number:	8837787
Patent Number:	9030502
Patent Number:	8687890
Patent Number:	8949110
Patent Number:	7957907
Patent Number:	8855935
Application Number:	11864218
Application Number:	13550800
Patent Number:	8824803
Application Number:	13618568
Application Number:	14029765
Patent Number:	8738297
Application Number:	14214856
Application Number:	14448721
Application Number:	14505066
Application Number:	62065726
Application Number:	62063849
Application Number:	62065557
Application Number:	62189422

Property Type	Number
Application Number:	62168808
Application Number:	62076308
Application Number:	13738871
Patent Number:	8938439
Patent Number:	8908971
Application Number:	14472202
Patent Number:	9053362
Application Number:	13739569
Application Number:	14457769
Application Number:	62044076

#### **CORRESPONDENCE DATA**

#### Fax Number:

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.

Email: michael.barys@thomsonreuters.com

Correspondent Name: ELAINE CARRERA, LEGAL ASSISTANT

Address Line 1: 80 PINE STREET

Address Line 2: C/O CAHILL GORDON & REINDAL LLP

Address Line 4: NEW YORK, NEW YORK 10005

NAME OF SUBMITTER:	ELAINE CARRERA
SIGNATURE:	
	/Michael Barys/
DATE SIGNED:	09/01/2015

#### **Total Attachments: 10**

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#### PATENT SECURITY AGREEMENT

**PATENT SECURITY AGREEMENT** (this "<u>Agreement</u>"), dated as of August 28, 2015, is entered into by each of the undersigned (each a "<u>Pledgor</u>," and collectively, the "<u>Pledgors</u>") in favor of Morgan Stanley Senior Funding, Inc., as collateral agent (together with its successors, in such capacity, the "<u>Collateral Agent</u>").

Reference is made to (a) the Pledge and Security Agreement dated as of the date hereof (as amended, supplemented or otherwise modified from time to time, the "Pledge and Security Agreement"), among the Grantors party thereto and the Collateral Agent and (b) the Credit and Guaranty Agreement dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Ancestry.com LLC, Ancestry US Holdings Inc., Ancestry.com Inc. (the "Borrower"), the Subsidiary Guarantors from time to time party thereto, the several banks, financial institutions, institutional investors and other entities from time to time parties to the Credit Agreement, as lenders or holders of the Loans (the "Lenders") and issuers of Letters of Credit, and Morgan Stanley Senior Funding, Inc., as Administrative Agent. The Lenders have agreed to extend credit to the Borrower subject to the terms and conditions set forth in the Credit Agreement. The obligations of the Lenders to extend such credit are conditioned upon, among other things, the execution and delivery of this Agreement. Pursuant to the Pledge and Security Agreement, the Pledgors are required to execute and deliver this Agreement. Accordingly, the parties hereto agree as follows:

SECTION 1. <u>Terms</u>. Each capitalized term used but not otherwise defined in this Agreement has the meaning given or ascribed to it in the Pledge and Security Agreement or the Credit Agreement, as applicable. The rules of construction specified in Section 1.2 of the Pledge and Security 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 the Obligations, each Pledgor hereby pledges to the Collateral Agent, its successors and assigns, for the ratable benefit of the Secured Parties, and hereby grants to the Collateral Agent, its successors and assigns, for the ratable benefit of the Secured Parties, a security interest in all right, title or interest in or to any and all of the following assets and properties now owned or at any time hereafter acquired by such Pledgor or in which such Pledgor now has or at any time in the future may acquire any right, title or interest (collectively, the "Patent Collateral"):

- (a) all United States and foreign patents and applications for letters patent throughout the world, including, but not limited to, any of the foregoing referred to on <u>Schedule I</u>, and all rights corresponding thereto throughout the world;
- (b) all reissues, divisions, continuations, continuations-in-part, extensions, and reexaminations of any of the foregoing;
- (c) the right to sue for past, present and future infringements of any of the foregoing; and

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(d) all proceeds of the foregoing, including, without limitation, licenses, royalties, income, payments, claims, damages, and proceeds of suit.

SECTION 3. <u>Recordation</u>. This Agreement has been executed and delivered by the Pledgors for the purpose of recording the grant of security interest herein with the United States Patent and Trademark Office. Each Pledgor authorizes and requests that the Commissioner of Patents and Trademarks record this Agreement.

SECTION 4. Guarantee and Collateral Agreement. The security interests granted to the Collateral Agent herein are granted in furtherance, and not in limitation of, the security interests granted to the Collateral Agent pursuant to the Pledge and Security Agreement. Each Pledgor 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 Pledge and Security 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 Pledge and Security Agreement, the terms of the Pledge and Security Agreement shall govern, and for the avoidance of doubt, Patent Collateral shall not include any Excluded Assets.

SECTION 5. <u>Counterparts</u>. This Agreement may be executed by one or more of the parties to this Agreement on any number of separate counterparts (including by telecopy or other electronic means, including PDF), and all of said counterparts taken together shall be deemed to constitute one and the same instrument.

SECTION 6. <u>Applicable Law</u>. THIS AGREEMENT SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES, EXCEPT FOR NEW YORK GENERAL OBLIGATIONS LAW SECTIONS 5-1401 AND 5-1402).

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

ANCESTRY.COM OPERATIONS INC.

Name: Howard Hochhauser

Title: Chief Financial Officer

ANCESTRY.COM DNA, LLC

Name: Howard Hochhauser

Title: Chief Financial Officer

iARCHIVES, INC.

By: Name: Howard Hochhauser

Fitle: Chief Financial Officer

[Ancestry Patent Security Agreement]

MORGAN STANLEY SENIOR FUNDING, INC., as Collateral Agent

By:

Name: Jonathon Rauen Title Authorized Signatory

[Ancestry Patent Security Agreement]

# **PATENTS**

Debtor/Grantor	<u>Title</u>	Appln. No.	Filing Date	Issue Date	Patent No.
ANCESTRY.COM OPERATIONS INC.	SYSTEM AND METHOD FOR ESTIMATING/DETERMINING THE DATE OF A PHOTO	13/440,754	4/5/2012	Pending	Pending
IARCHIVES, INC.	SYSTEM AND METHOD FOR CREATING A SEARCHABLE WORD INDEX OF A SCANNED DOCUMENT INCLUDING MULTIPLE INTERPRETATIONS OF A WORD AT A GIVEN DOCUMENT LOCATION	10/049,016	6/8/2004	7/3/2007	7,240,062
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR STORING AND RETRIEVING DATA IN A WEB SERVER ENVIRONMENT	10/247,787	9/19/2002	9/19/2006	7,111,144
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR PARTITIONING DATA ON MULTIPLE SERVERS	10/247,273	9/19/2002	6/24/2008	7,392,268
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR PARTITIONING DATA ON MULTIPLE SERVERS	12/144,341	6/23/2008	9/13/2011	8,019,719
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR DISPLAYING STATISTICAL INFORMATION ON A WEB PAGE	10/247,769	9/19/2002	2/12/2013	8375286
ANCESTRY.COM OPERATIONS INC.	PROVIDING ALTERNATIVES WITHIN A FAMILY TREE SYSTEMS AND METHODS	10/748,442	12/29/2003	1/10/2012	8,095,567
ANCESTRY.COM OPERATIONS INC.	PROVIDING ALTERNATIVES WITHIN A FAMILY TREE SYSTEMS AND METHODS	13/326,718	12/15/2011	7/1/2014	8768970
ANCESTRY.COM OPERATIONS INC.	CORRELATING GENEALOGY RECORDS SYSTEMS AND METHODS	10/748,439	12/29/2003	7/24/2007	7,249,129
ANCESTRY.COM OPERATIONS INC.	CORRELATING GENEALOGY RECORDS SYSTEMS AND METHODS	11/777,215	7/12/2007	1/11/2011	7,870,139
ANCESTRY.COM OPERATIONS INC.	ADAPTIVE CONTRAST CONTROL SYSTEMS AND METHODS	11/188,137	7/21/2005	5/25/2010	7,724,981
ANCESTRY.COM OPERATIONS INC.	LOCAL INSTALLATION OF REMOTE SOFTWARE SYSTEMS AND METHODS	11/342,251	1/26/2006	3/15/2011	7,908,315
ANCESTRY.COM OPERATIONS INC.	IMAGE WATERMARKING SYSTEMS AND METHODS	11/388,231	3/22/2006	7/13/2010	7,756,289
ANCESTRY.COM OPERATIONS INC.	MULTIPLE IMAGE INPUT FOR OPTICAL CHARACTER RECOGNITION PROCESSING SYSTEMS AND METHODS	11/560,026	11/15/2006	6/8/2010	7,734,092
ANCESTRY.COM OPERATIONS INC.	IMAGE QUALITY MONITORING AND TAGGING AT SCAN TIME	11/750,191	5/17/2007	5/21/2013	8446652
ANCESTRY.COM OPERATIONS INC.	COMPUTER-ASSISTED IMAGE CROPPING FOR BOOK SCANS	11/841,268	8/20/2007	5/17/2011	7,945,116
ANCESTRY.COM OPERATIONS INC.	USER INTERFACE METHODS AND SYSTEMS FOR IMAGE BRIGHTNESS AND CONTRAST	11/845,635	8/27/2007	12/6/2011	8,073,285
ANCESTRY.COM OPERATIONS INC.	USER INTERFACE METHOD FOR SKEW CORRECTION	11/844,443	8/24/2007	8/21/2012	8249391

Debtor/Grantor	<u>Title</u>	Appln. No.	Filing Date	Issue Date	Patent No.
ANCESTRY.COM OPERATIONS INC.	VISUALIZING, CREATING AND EDITING BLENDING MODES METHODS AND SYSTEMS	12/240,566	9/29/2008	2/5/2013	8370759
ANCESTRY.COM OPERATIONS INC.	VISUALIZING, CREATING AND EDITING BLENDING MODES METHODS AND SYSTEMS	13733045	1/2/2013		
ANCESTRY.COM OPERATIONS INC.	DEVICES, SYSTEMS AND METHODS FOR TRANSCRIPTION SUGGESTIONS AND COMPLETIONS	12/605,999	10/26/2009	12/3/2013	8600152
ANCESTRY.COM OPERATIONS INC.	COLLABORATIVE SYSTEMS AND METHODS FOR CONSTRUCTING REPRESENTATIONS OF DATA	12/510,999	7/28/2009	1/15/2013	8356023
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR THE ORGANIZED DISTRIBUTION OF RELATED DATA	12/511,009	7/28/2009	7/17/2012	8224821
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR COMMUNICATION AMONG COLLABORATING USERS	12/511,023	7/28/2009	9/2/2014	8825705
ANCESTRY.COM OPERATIONS INC.	POSITIONING OF NON- CONSTRAINED AMOUNT OF DATA IN SEMBLANCE OF A TREE	12/695,056	1/27/2010	5/22/2012	8,185,557
ANCESTRY.COM OPERATIONS INC.	INTERACTIVE MODIFICATION OF SPACING CONSTRAINTS OF GENEALOGICAL CHARTS WITH LIVE FEEDBACK	12/647,767	12/28/2009	Published	Published
ANCESTRY.COM OPERATIONS INC.	AUTOMATIC PEDIGREE CORRECTIONS	12/691,571	1/21/2010	Published	Published
ANCESTRY.COM OPERATIONS INC.	CONSOLIDATED INFORMATION RETRIEVAL RESULTS	12/758,238	4/12/2010	3/20/2012	8,140,512
ANCESTRY.COM OPERATIONS INC.	CONSOLIDATED INFORMATION RETRIEVAL RESULTS	13/422,245	3/16/2012	12/3/2013	8600980
ANCESTRY.COM OPERATIONS INC.	METHODS AND SYSTEMS FOR IMPLEMENTING ANCESTRAL RELATIONSHIP GRAPHICAL INTERFACE	13/035,816	2/25/2011	Published	Published
ANCESTRY.COM OPERATIONS INC.	ANCESTOR-TO-ANCESTOR RELATIONSHIP LINKING METHODS AND SYSTEMS	13/035,845	2/25/2011	7/22/2014	8786603
ANCESTRY.COM OPERATIONS INC.	METHODS AND SYSTEMS FOR IDENTIFICATION AND TRANSCRIPTION OF INDIVIDUAL ANCESTRAL RECORDS AND FAMILY RELATIONSHIPS	13/049,671	3/16/2011	7/29/2014	8793574
ANCESTRY.COM OPERATIONS INC.	MULTI-ANGLE AND MULTI- POSITION REPROGRAPHIC COPY STAND	13/075,565	3/30/2011	11/25/2014	8894027
ANCESTRY.COM OPERATIONS INC.	DUAL SIDED MIRROR BOOK IMAGING DEVICES AND METHODS	13/022,813	2/8/2011	8/12/2014	8801201
ANCESTRY.COM OPERATIONS INC.	MULTI-PERPENDICULAR LINE- BASED DESKEW WITH AFFINE AND PERSPECTIVE DISTORTION CORRECTION	13/325,396	12/14/2011	5/20/2014	8731336
ANCESTRY.COM OPERATIONS INC.	METHODS AND SYSTEM FOR DISPLAYING PEDIGREE CHARTS ON A TOUCH DEVICE	13/333,670	12/21/2011	7/1/2014	8769438
ANCESTRY.COM OPERATIONS INC.	METHODS AND SYSTEMS FOR DISPLAYING BLENDED FAMILY GENEALOGICAL INFORMATION	13/330,322	12/19/2011	9/2/2014	8825709
ANCESTRY.COM OPERATIONS INC.	SYSTEM AND METHOD FOR ASSOCIATING A PHOTO WITH A DATA STRUCTURE NODE	13/440,811	4/5/2012	9/16/2014	8837787
ANCESTRY.COM	SYSTEM AND METHOD FOR	13/440,586	4/5/2012	5/12/2015	9030502

Debtor/Grantor	<u>Title</u>	Appln. No.	Filing Date	Issue Date	Patent No.
OPERATIONS INC.	ORGANIZING DOCUMENTS				
ANCESTRY.COM OPERATIONS INC.	SYSTEM AND METHOD FOR CAPTURING RELEVANT INFORMATION FROM A PRINTED DOCUMENT	13/242,736	9/23/2011	4/1/2014	8687890
ANCESTRY.COM OPERATIONS INC.	SYSTEM AND METHOD FOR EXTRACTING CATEGORIES OF DATA	13/242,566	9/23/2011	2/3/2015	8949110
ANCESTRY.COM DNA, LLC	METHOD FOR MOLECULAR GENEALOGICAL RESEARCH	10/113,901	03/29/2002	6/7/2011	7,957,907
ANCESTRY.COM DNA, LLC	METHOD AND SYSTEM FOR DISPLAYING GENETIC AND GENEALOGICAL DATA	11/541,796	10/2/2006	10/7/2014	8855935
ANCESTRY.COM DNA, LLC	METHOD AND SYSTEM FOR DISPLAYING GENETIC AND GENEALOGICAL DATA	11/864,218	9/28/2007	Published	Published
ANCESTRY.COM OPERATIONS INC.	SYSTEMS AND METHODS FOR THE ORGANIZED DISTRIBUTION OF RELATED DATA	13/550,800		Pending	Pending
ANCESTRY.COM OPERATIONS INC.	AUTOMATED FIELD POSITION LINKING OF INDEXED DATA TO DIGITAL IMAGES	13/601,111	8/31/2012	9/2/2014	8824803
ANCESTRY.COM OPERATIONS INC.	SOCIAL TREE CREATION	13618568	9/14/2012	Pending	Pending
ANCESTRY.COM OPERATIONS INC.	METHODS AND SYSTEM FOR DISPLAYING PEDIGREE CHARTS ON A TOUCH DEVICE	13333670	12/21/2011	7/1/2014	8769438
ANCESTRY.COM DNA, LLC.	METHOD AND SYSTEM FOR DISPLAYING GENETIC AND GENEALOGICAL DATA	11/541,796	10/2/2006	10/7/2014	8855935
ANCESTRY.COM DNA, LLC.	IDENTIFYING ANCESTRAL RELATIONSHIPS USING A CONTINUOUS STREAM OF INPUT	14/029,765	9/17/2013	Pending	Pending
Ancestry.com DNA, LLC	Method for molecular genealogical research	13/066,680	4/20/2011	5/27/2014	8738297
Ancestry.com DNA,	Family networks	14/214,856	3/15/2014	Pending	Pending
Ancestry.com DNA, LLC	Sample collection device	14/448,721	7/31/2014	Pending	Pending
Ancestry.com DNA, LLC	Method and system for displaying genetic and genealogical data	14/505,066	10/2/2014	Pending	Pending

Debtor/Grantor	<u>Title</u>	Appln. No.	Filing Date	<u>Issue Date</u>	Patent No.
Ancestry.com DNA,	HAPLOTYPE PHASING MODELS	62065726	10/19/2014		
Ancestry.com DNA,	REDUCING ERROR IN PREDICTED GENETIC RELATIONSHIPS	62063849	10/14/2014		
Ancestry.com DNA, LLC	ANCESTRAL HUMAN GENOMES	62065557	10/17/2014		
Ancestry.com DNA,	BIRTH LOCATION AND SURNAME RECOMMENDATION SYSTEM	62189422	7/7/2015		
Ancestry.com DNA,	LOCAL GENETIC ETHNICITY DETERMINATION SYSTEM	62189422	7/13/2015		
Ancestry.com DNA, LLC	DISCOVERING HISTORICAL POPULATIONS FROM DENSELY CONNECTED SHARED-DNA SUBNETWORKS	62168808	5/30/2015		
Ancestry.com DNA, LLC	PREDICTING HEALTH OUTCOMES	62076308	11/6/2014		
Ancestry.com Operations Inc.	Systems and methods for displaying statistical information on a web page	13/738,871	1/10/2013	Pending	Pending
Ancestry.com Operations Inc.	COLLABORATIVE SYSTEMS AND METHODS FOR CONSTRUCTING REPRESENTATIONS OF DATA	13/718,441	12/18/2012	1/20/2015	8938439
Ancestry.com Operations Inc.	DEVICES, SYSTEMS AND METHODS FOR TRANSCRIPTION SUGGESTIONS AND COMPLETIONS	14/036,404	9/25/2013	12/9/2014	8908971
Ancestry.com Operations Inc.	AUTOMATED FIELD POSITION LINKING OF INDEXED DATA TO DIGITAL IMAGES	14/472,202	8/28/2014	Pending	Pending
Ancestry.com Operations Inc.	SYSTEM AND METHOD FOR CAPTURING RELEVANT INFORMATION FROM A PRINTED DOCUMENT	14/174,733	2/6/2014	6/9/2015	9053362
Ancestry.com Operations Inc.	DUAL SIDED MIRROR BOOK IMAGING DEVICES AND METHODS	13/022,813	2/8/2011	8/12/2014	8801201
Ancestry.com Operations Inc.	SYSTEM AND METHOD FOR CAPTURING RELEVANT INFORMATION FROM A PRINTED DOCUMENT	13/242,736	9/23/2011	4/1/2014	8687890

Debtor/Grantor	<u>Title</u>	Appln. No.	Filing Date	Issue Date	Patent No.
Ancestry.com Operations Inc.	GENEALOGY INVESTIGATION AND DOCUMENTATION SYSTEMS AND METHODS	13739569	1/11/2013		
Ancestry.com Operations Inc.	SYSTEM AND METHOD FOR IDENTIFYING RELATIONSHIPS IN A DATA GRAPH	14457769	8/12/2014		
Ancestry.com Operations Inc.	SYSTEM AND METHOD FOR TRANSCRIBING HISTORICAL RECORDS INTO DIGITIZED TEXT	62044076	8/28/2014		