



US009129133B2

(12) **United States Patent**  
**LaFever et al.**

(10) **Patent No.:** **US 9,129,133 B2**

(45) **Date of Patent:** **\*Sep. 8, 2015**

(54) **DYNAMIC DE-IDENTIFICATION AND ANONYMITY**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **14/530,304**

(22) Filed: **Oct. 31, 2014**

(65) **Prior Publication Data**

US 2015/0128284 A1 May 7, 2015

**Related U.S. Application Data**

(63) Continuation of application No. 14/529,960, filed on Oct. 31, 2014, now Pat. No. 9,087,215.

(60) Provisional application No. 61/899,096, filed on Nov. 1, 2013, provisional application No. 61/938,631, filed

(Continued)

(51) **Int. Cl.**

**G06F 21/62** (2013.01)

**H04L 29/08** (2006.01)

(52) **U.S. Cl.**

CPC ..... **G06F 21/6254** (2013.01); **H04L 67/02**

(2013.01)

(58) **Field of Classification Search**

CPC ..... G06F 21/6254

USPC ..... 726/2-4, 27-30

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

7,430,755 B1 9/2008 Hughes

7,454,356 B2 11/2008 Fields

(Continued)

**OTHER PUBLICATIONS**

Ohm, Paul, "Broken Promises Of Privacy: Responding To The Surprising Failure Of Anonymization," UCLA Law Review, Aug. 2009 [retrieved from <http://www.uclalawreview.org/?p=1353>].

(Continued)

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(57) **ABSTRACT**

Various systems, computer-readable media, and computer-implemented methods of providing improved data privacy, anonymity and security by enabling subjects to which data pertains to remain "dynamically anonymous," i.e., anonymous for as long as is desired—and to the extent that is desired—are disclosed herein. Embodiments include systems that create, access, use, store and/or erase data with increased privacy, anonymity and security, thereby facilitating the availability of more qualified and accurate information. When data is authorized by subjects to be shared with third parties, embodiments may facilitate sharing information in a dynamically controlled manner that enables delivery of temporally-, geographically-, and/or purpose-limited information to the receiving party. In one example, anonymity measurement scores may be calculated for the shared data elements so that a level of consent/involvement required by the Data Subject before sharing the relevant data elements to third parties may be specified.

**26 Claims, 43 Drawing Sheets**

