



- (51) **International Patent Classification:**
G06F 21/64 (2013.01) *G06F 17/00* (2006.01)
- (21) **International Application Number:**
PCT/US2016/038227
- (22) **International Filing Date:**
17 June 2016 (17.06.2016)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/186,266 29 June 2015 (29.06.2015) US
- (71) **Applicant:** PEERNOVA, INC. [US/US]; 100 Century Center Court, Suite 700, San Jose, CA 95112 (US).
- (72) **Inventors:** GANESAN, Gangesh, Kumar; Peernova, Inc., 100 Century Center Court, Suite 700, San Jose, CA 95112 (US). HUDSON, David, John; Peernova, Inc., 100 Century Center Court, Suite 700, San Jose, CA 95112 (US). GEE, Kevin, Michael; Peernova, Inc., 100 Century Court, Suite 700, San Jose, CA 95112 (US).
- (74) **Agents:** PEREZ, Edgar et al.; FENWICK & WEST LLP, 801 California Street, Mountain View, CA 94041 (US).
- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,

DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) **Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- upon request of the applicant, before the expiration of the time limit referred to in Article 21(2)(a)

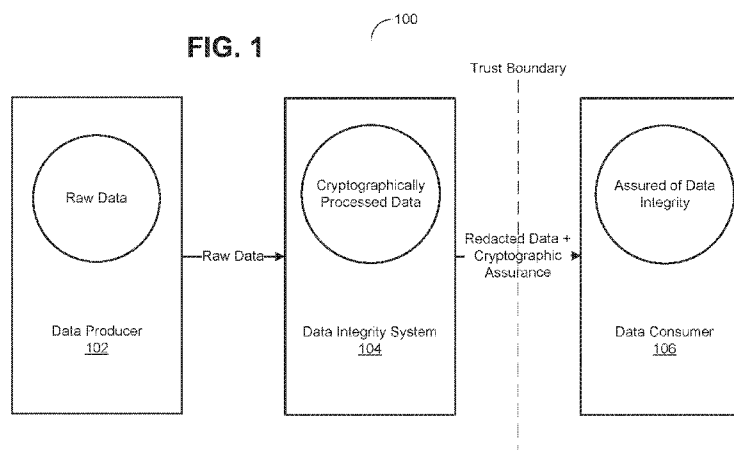
- (88) **Date of publication of the international search report:**
26 May 2017

- (15) **Information about Correction:**

Previous Correction:

see Notice of 6 April 2017

- (54) **Title:** CRYPTOGRAPHIC ASSURANCES OF DATA INTEGRITY FOR DATA CROSSING TRUST BOUNDARIES

FIG. 1

- (57) **Abstract:** A data integrity system generates a transaction signature associated with a transaction based on transaction data received from a data producer. The transaction signature is unique to the transaction and is generated by applying a hash function to the transaction data. When the transaction data is to be transmitted to a data consumer, the data integrity system redacts the transaction data based on permission information associated with the data, consumer and transmits the redacted transaction data to the data consumer. To enable the data consumer to verify the integrity of the received data, the data integrity system also transmits a cryptographic assurance that includes at least the transaction signature associated with the transaction. The data consumer verifies the integrity of the received data by independently generating a transaction signature based on the redacted transaction data and matching the independently generated signature with the transaction signature in the cryptographic assurance.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/38227

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 21/64, G06F 17/00 (2017.01)

CPC - G06F 21/64

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
CPC: G06F21/64; IPC(8): G06F 21/64, G06F 17/00 (2017.01); USPC: 707/687Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC: G06F17/30067, G06F17/30286, G06F11/1435, G06F17/30864, H03M7/30, G06F21/64; USPC: 380/255, 713/182, 713/193, 726/26, 707/687, 713/189, 707/802 (keyword limited; terms below)Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase; Google Scholar

Search Terms: key-value transaction store hash signature redact verification

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2014/0189359 A1 (MARIEN et al.) 03 July 2014 (03.07.2014), entire document, especially abstract and para [0173]-[0180], [0333], [0336]-[0337], [0342], [0347]-[0349], [0378], [0387]-[0388], [0431], [0441], [0474]-[0476], [0520]-[0521], [0534]-[0537], Fig. 4, Fig. 13, Fig. 14.	1-20
A	US 2011/0208947 A1 (LIN et al.) 25 August 2011 (25.08.2011), entire document.	1-20

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:

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"&" document member of the same patent family

Date of the actual completion of the international search

23 January 2017

Date of mailing of the international search report

17 FEB 2017

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450

Facsimile No. 571-273-8300

Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300

PCT OSP: 571-272-7774