



(51) International Patent Classification:
G06F 11/14 (2006.01)

(21) International Application Number:
PCT/US2024/060078

(22) International Filing Date:
13 December 2024 (13.12.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/609,517 13 December 2023 (13.12.2023) US

(71) Applicant: **AB INITIO TECHNOLOGY LLC** [US/US];
201 Spring St., Lexington, MA 02421 (US).

(72) Inventor: **BABROUDI, Zori**; 78 Forest Ridge Rd, Unit
301, Concord, MA 01742 (US).

(74) Agent: **RIMKUNAS, Zachary, J.**; Occhiuti & Rohlicek
LLP, 50 Congress Street, Suite 1000, Boston, MA 02109
(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, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, 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, ST, SV, SY, TH,

(54) Title: PARTITION-BASED ESCROW IN A DISTRIBUTED COMPUTING SYSTEM

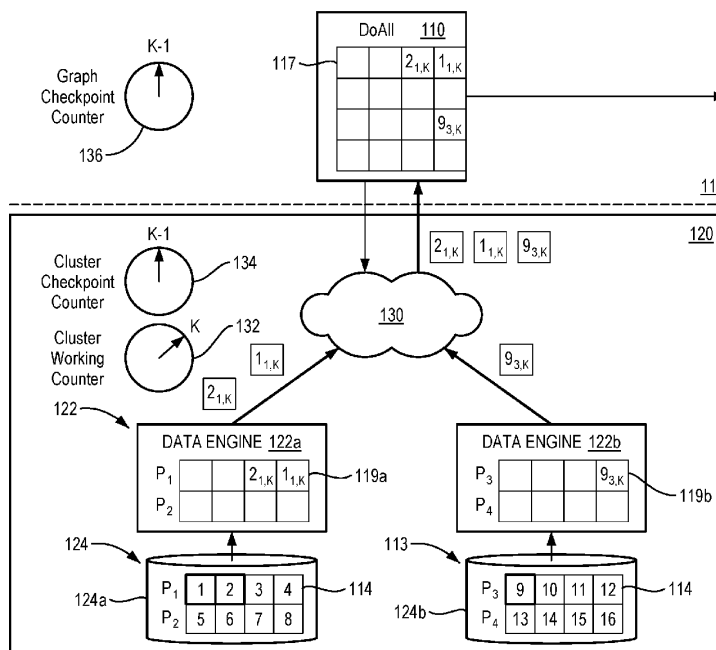


FIG. 2

(57) **Abstract:** A method for fault-tolerant processing of a number of data elements using a distributed computing cluster. The distributed computing cluster includes a number of data processors associated with a corresponding number of data stores. The method includes storing the data elements in the distributed computing cluster, wherein the data elements are distributed across the data stores according to a number of partitions of data elements, processing data elements of a first set of partitions stored at a first data store using a first data processor to generate first result data for the data elements of the first set of partitions, sending the first result data from the distributed computing cluster to a processing component of the first result data outside the distributed computing cluster, and storing the first result data in a first buffer located in the distributed computing cluster and associated with the first data processor until the processing component has persistently stored the first result data outside the distributed computing cluster.

[Continued on next page]

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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))*
 - *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*
-