



(51) International Patent Classification:

G06F 3/06 (2006.01) *H04L 67/01* (2022.01)
H04L 9/40 (2022.01) *H04L 67/1097* (2022.01)

(21) International Application Number:

PCT/US2024/054887

(22) International Filing Date:

07 November 2024 (07.11.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

18/504,374 08 November 2023 (08.11.2023) US

(71) Applicant: **DIGITAL PORPOISE, LLC** [US/US]; 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US).

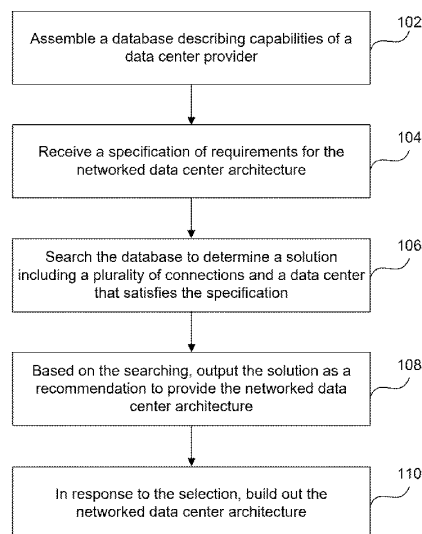
(72) Inventors: **MILLS, Scott William**; c/o Digital Porpoise, LLC, 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US). **MOULAND, Brooke James**; c/o Digital Porpoise, LLC, 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US). **WALLACE, Scott Michael**; c/o Digital Porpoise, LLC, 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US). **KEKE, Okechukwu Ekene**; c/o Digital Porpoise, LLC, 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US). **CADE, Brian Andrew**; c/o Digital Porpoise, LLC, 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US). **EWERT, Travis Duane**; c/o Digital Porpoise, LLC, 5707 Southwest Parkway, Building 1, Suite 275, Austin, Texas 78735 (US).

(74) Agent: **MUTSCHELKNAUS, Joseph** et al.; Sterne, Kessler, Goldstein & Fox P.L.L.C, 1101 K Street NW, 10th Floor, Washington, District of Columbia 20005 (US).

(54) Title: MODELING A NETWORK DATA CENTER ARCHITECTURE, AND APPLICATIONS THEREOF

FIG. 1

100



(57) Abstract: In an embodiment, a method automatically determines a networked data center architecture. In the method, a database describing capabilities of a data center provider is assembled. The database describes capabilities of a plurality of data centers of the data center provider. A specification of requirements for the networked data center architecture is received. The specification describes data processing and connectivity requirements of a customer of a data center provider. The database is searched to determine a solution including a plurality of connections and data center that satisfy the specification. Based on the searching, the solution is output as a recommendation to provide the networked data center architecture. In another embodiment, options for a networked data center architecture are visualized. In yet another embodiment, API calls are made to provision the networked data center architecture.

[Continued on next page]

(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, 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))