



(51) International Patent Classification:

H04L 12/28 (2006.01) H04L 45/00 (2022.01)
G06F 9/50 (2006.01) H04L 45/44 (2022.01)
H04L 12/46 (2006.01) H04L 45/74 (2022.01)

(21) International Application Number:

PCT/US2024/042549

(22) International Filing Date:

15 August 2024 (15.08.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

18/455,366 24 August 2023 (24.08.2023) US

(71) Applicant: EQUINIX, INC. [US/US]; One Lagoon Drive,
Redwood City, CA 94065 (US).

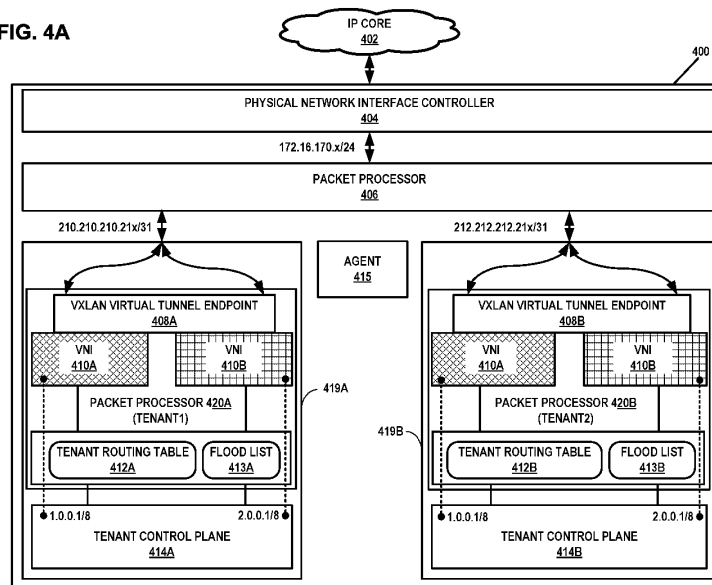
(72) Inventor: HASHIM, Syed, Iqbal; One Lagoon Drive,
Redwood City, CA 94065 (US).

(74) Agent: BUSCHBACH, Michael, A.; Shumaker & Sieffert,
P.A., 1625 Radio Dr Suite 300, Woodbury, MN 55125 (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,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(54) Title: TENANT-SPECIFIC VIRTUAL TUNNEL ENDPOINTS FOR VXLANs

FIG. 4A



(57) Abstract: In general, this disclosure describes techniques for enabling multiple Virtual Extensible LAN (VXLAN) Virtual Tunnel Endpoints (VTEPs) per compute node within a computing infrastructure. In one example, a computing device comprises a network interface controller (NIC) and processing circuitry having access to storage media encoded with instructions, the processing circuitry configured to receive, by a main packet processor, a packet from the NIC. The processing circuitry is further configured to send, by the main packet processor, based on a virtual extensible local area network (VXLAN) tunnel endpoint (VTEP) indicated by a packet, the packet to a tenant-specific packet processor associated with the VTEP. The processing circuitry is further configured to send, by the tenant-specific packet processor, at least a portion of the packet to a workload. The processing circuitry is further configured to process, by the workload, the at least a portion of the packet.

[Continued on next page]

(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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*