



(51) International Patent Classification:

G06Q 10/0631 (2023.01) G16H 40/60 (2018.01)
G16H 30/20 (2018.01) G16H 40/67 (2018.01)
G06V 10/82 (2022.01) G16H 50/20 (2018.01)

(21) International Application Number:

PCT/US2022/053893

(22) International Filing Date:

22 December 2022 (22.12.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/293,018 22 December 2021 (22.12.2021) US

(71) Applicant: ANALYTICAL AI INC. [US/US]; 1500 1st Ave N., Suite C129/E125, Birmingham, Alabama 35203 (US).

(72) Inventors: ANTHONY, Thomas; 2608 Columbiana Rd., Birmingham, Alabama 35216 (US). SKIDMORE, Frank M.; 3524 Brookwood Road, Mountain Brook, Alabama 35223 (US).

(74) Agent: MEHTA, Mainak H. et al.; c/o Procopio, Cory, Hargreaves & Savitch LLP, 525 B Street, Suite 2200, San Diego, California 92101-4469 (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,

(54) Title: SYSTEM AND METHOD FOR HIGH PERFORMANCE, VENDOR-AGNOSTIC INFERENCE APPLIANCE

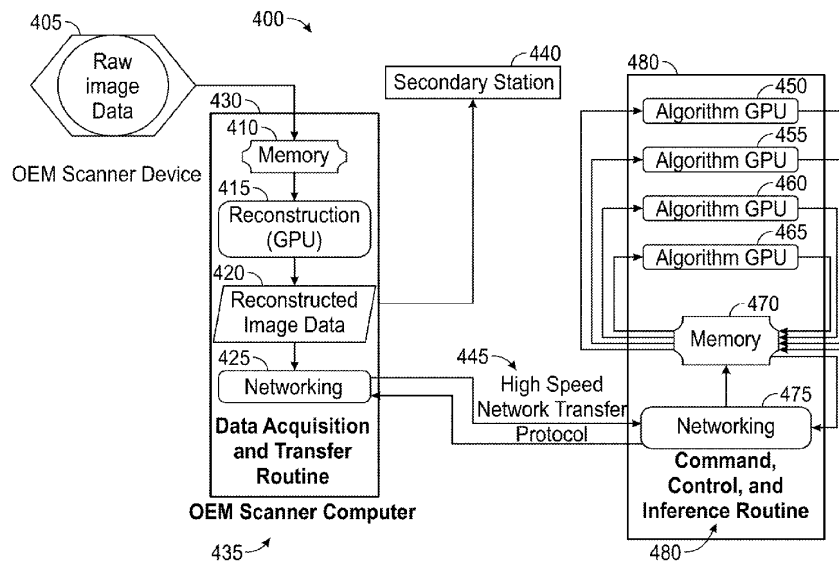


FIG. 4

(57) Abstract: Urgent screening in high-throughput, secure environments such as emergency rooms, or security, typically involves multiple devices. Devices that are used for screening are diverse, and typically sourced from multiple vendors. Currently, devices are typically stand-alone. Further, large devices, are costly, having high capital expenses with long commercial lifetimes, sometimes approaching a decade or more. The result of these features leads to duplication of computational resources, obsolescent computational infrastructure, and lack of interconnection between elements. Aspects of this invention include a device, system, and methods to provide vendor-agnostic interconnection between the multiple elements of a defined environment. The disclosed approach untethers AI algorithms from data generation system and increases flexibility in deployment of newer technologies and algorithms. Example systems can be updated or replaced with new hardware, as computational capabilities develop on short or emergent quality improvement cycles,

[Continued on next page]

KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,
LY, MA, MD, 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, 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, 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))*

and can adapt nimbly to changes in threats, regulatory requirements or market developments.