

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 July 2021 (08.07.2021)



(10) International Publication Number
WO 2021/138087 A1

(51) International Patent Classification:
G06K 9/62 (2006.01) *G06K 9/00* (2006.01)

(21) International Application Number:
PCT/US2020/066045

(22) International Filing Date:
18 December 2020 (18.12.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/956,876 03 January 2020 (03.01.2020) US

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(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, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, 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, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(54) Title: SYSTEMS AND METHODS FOR PROCESSING ELECTRONIC IMAGES FOR GENERALIZED DISEASE DETECTION

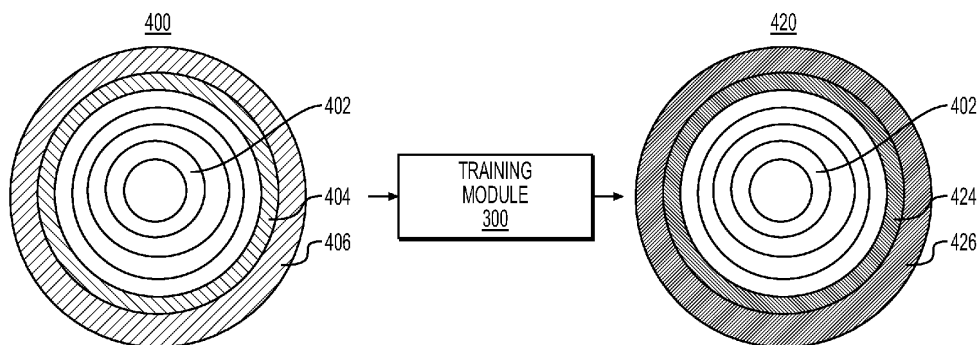


FIG. 4

(57) Abstract: Systems and methods are disclosed for generating a specialized machine learning model by receiving a generalized machine learning model generated by processing a plurality of first training images to predict at least one cancer characteristic, receiving a plurality of second training images, the first training images and the second training images include images of tissue specimens and/or images algorithmically generated to replicate tissue specimens, receiving a plurality of target specialized attributes related to a respective second training image of the plurality of second training images, generating a specialized machine learning model by modifying the generalized machine learning model based on the plurality of second training images and the target specialized attributes, receiving a target image corresponding to a target specimen, applying the specialized machine learning model to the target image to determine at least one characteristic of the target image, and outputting the characteristic of the target image.

[Continued on next page]

WO 2021/138087 A1

(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))