



- (51) International Patent Classification:
G06K 9/62 (2006.01) *G06N 20/00* (2019.01)
- (21) International Application Number:
PCT/IL2021/050242
- (22) International Filing Date:
04 March 2021 (04.03.2021)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
62/993,112 23 March 2020 (23.03.2020) 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.
- (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,

(54) Title: ADAPTIVE LEARNING FOR IMAGE CLASSIFICATION

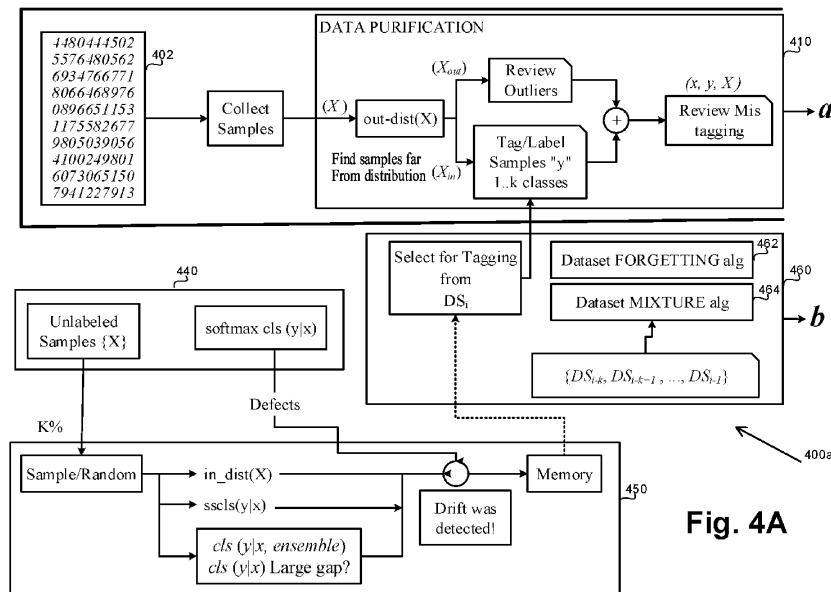


Fig. 4A

(57) **Abstract:** A method, a computerized apparatus and a computer program product for adaptive learning for image classification. The method comprises applying a set of classification models on a calibration dataset and on a production dataset, and calculating disagreement measurements over the predictions thereof on each dataset. Based on similarity measurement between the disagreement measurement of the calibration and the production datasets, being below a predetermined threshold, a data drift is indicated in the production dataset. The method further comprises determining a training dataset for training a classification model for the production dataset. The training dataset is selected over a plurality of sets of images ordered according to time intervals in which images therein are obtained. The selection is performed based on weights determined for the plurality of sets.

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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))*