



(51) International Patent Classification:
G06F 17/30 (2006.01) *G06K 9/54* (2006.01)

(21) International Application Number:
PCT/SG2009/000198

(22) International Filing Date:
5 June 2009 (05.06.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/059,331 6 June 2008 (06.06.2008) US

(71) Applicant (for all designated States except US): **AGENCY FOR SCIENCE, TECHNOLOGY AND RESEARCH** [SG/SG]; 1 Fusionopolis Way, #20-10, Connexis, Singapore 138632 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LI, Yiqun** [SG/SG]; c/o IPTO, Institute for Infocomm Research, 1 Fusionopolis Way, #21-01, Connexis, South Tower, Singapore 138632 (SG). **LIM, Joo Hwee** [SG/SG]; c/o IPTO, Institute for Infocomm Research, 1 Fusionopolis Way, #21-01, Connexis, South Tower, Singapore 138632 (SG). **GOH, Hanlin** [SG/SG]; c/o IPTO, Institute for Infocomm Research, 1 Fusionopolis Way, #21-01, Connexis, South Tower, Singapore 138632 (SG).

(74) Agent: **ELLA CHEONG SPRUSON & FERGUSON (SINGAPORE) PTE LTD**; P.O. Box 1531, Robinson Road Post Office, Singapore 903031 (SG).

(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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: METHOD AND SYSTEM FOR MAINTAINING A DATABASE OF REFERENCE IMAGES

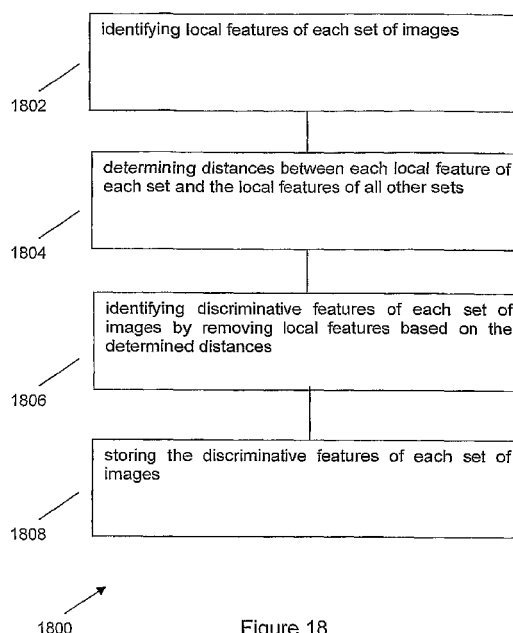


Figure 18

(57) Abstract: A method and system for maintaining a database of reference images, the database including a plurality of sets of images, each set associated with one location or object. The method comprises the steps of identifying local features of each set of images; determining distances between each local feature of each set and the local features of all other sets; identifying discriminative features of each set of images by removing local features based on the determined distances; and storing the discriminative features of each set of images.