

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2013/110013 A8

(43) International Publication Date
25 July 2013 (25.07.2013)

- (51) International Patent Classification:
G06K 9/62 (2006.01)
- (21) International Application Number:
PCT/US2013/022336
- (22) International Filing Date:
20 January 2013 (20.01.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/589,165 20 January 2012 (20.01.2012) US
- (72) Inventors; and
- (71) Applicants: ANNAPRAGADA, Ananth [US/US]; 3114 Spring Ridge Drive, Manvel, TX 77578 (US). STAROSOLSKI, Zbigniew [PL/US]; 1 Hermann Museum Circle Drive, #2017, Houston, TX 77004 (US).
- (74) Agent: KERN, Benjamin, E.; Law Office of Benjamin E. Kern, 5327 Westpoint Plaza Drive, PMB 207, Columbus, OH 43228 (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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, 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, ML, MR, NE, SN, TD, TG).

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

(54) Title: METHODS AND COMPOSITIONS FOR OBJECTIVELY CHARACTERIZING MEDICAL IMAGES

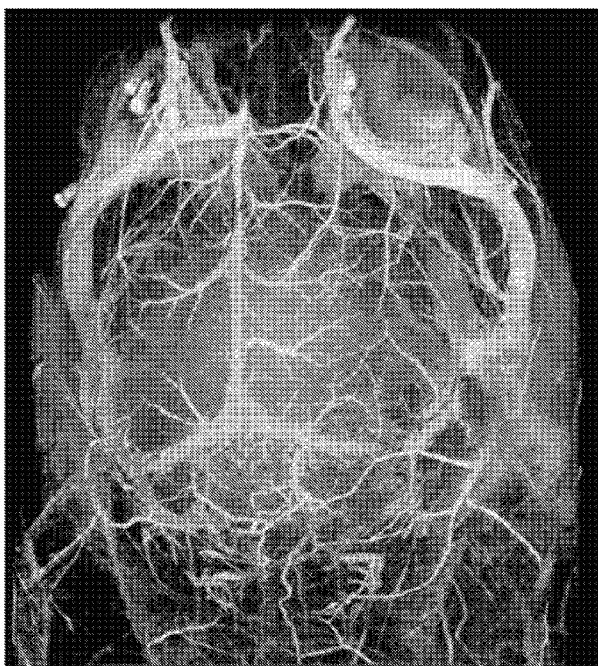


Figure 1

(57) Abstract: Methods and compositions are provided for objectively characterizing a pathological lesion in a patient. The method comprises: introducing into the patient a contrast enhancing agent; subjecting the patient to at least one of magnetic resonance imaging and computed tomography to obtain an image; and applying a 3-D autocorrelation function to a subdomain of interest of the image to obtain at least one 3-D autocorrelation spectrum. The method may further comprise comparing the at least one 3-D autocorrelation spectrum to a pre-existing 3-D autocorrelation spectrum that is characteristic for the pathological lesion. In one example, the methods and compositions may be useful for identifying and objectively characterizing amyloid plaque deposits characteristic of Alzheimer's Disease.



WO 2013/110013 A8

(48) Date of publication of this corrected version:

02 August 2018 (02.08.2018)

(15) Information about Correction:

see Notice of 02 August 2018 (02.08.2018)