

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 September 2008 (04.09.2008)

PCT

(10) International Publication Number
WO 2008/105650 A1

(51) International Patent Classification:

G06T 17/40 (2006.01) **G06K 15/02** (2006.01)
G06K 15/12 (2006.01) **G06T 11/40** (2006.01)
G06T 15/20 (2006.01) **G06T 15/60** (2006.01)

(21) International Application Number:

PCT/MY2008/000015

(22) International Filing Date:

27 February 2008 (27.02.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0704002.5 1 March 2007 (01.03.2007) GB

(71) Applicant (for all designated States except US): **MAG-IQADS SDN BHD** [MY/MY]; 38-2, Jalan Telawi, Bangsar Baru, 59100 Kuala Lumpur (MY).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MOHAMMED AMIN, Azmi Bin** [MY/MY]; 35 Jalan USJ 5/2, UEP

Subang Jaya, 47610 Subang Jaya, Selangor D.E. (MY).
BONG, Chong Joo, Jimmy [MY/MY]; 74 Jalan Bertam Jaya 10, Taman Bertam Jaya, 76450 Melaka (MY).

(74) Agent: **CHEW, Kherk, Ying**; Wong & Partners, Level 41 - Suite A, Menara Maxis, Kuala Lumpur City Centre, Kuala Lumpur 50088 (MY).

(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, 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, 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,

[Continued on next page]

(54) Title: METHOD OF CREATION OF A VIRTUAL THREE DIMENSIONAL IMAGE TO ENABLE ITS REPRODUCTION ON PLANAR SUBSTRATES

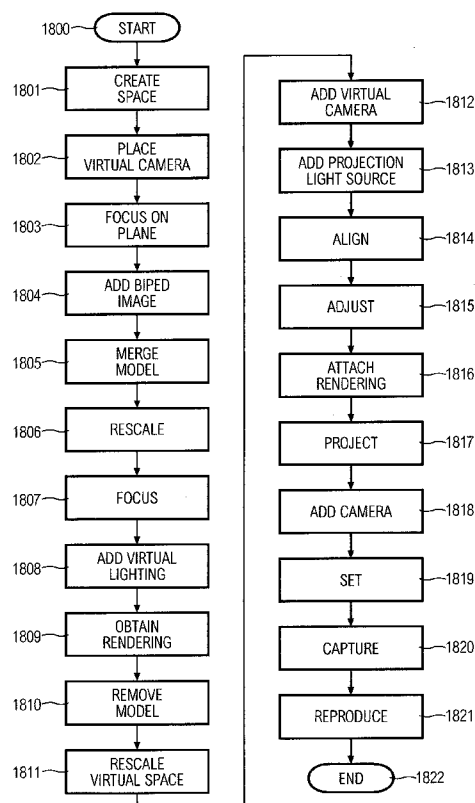


FIG. 18

(57) Abstract: A method of creation of a virtual three dimensional image to enable its reproduction on at least one planar substrate includes creating a virtual three dimensional space that includes a ground plane. A virtual model of an object is merged into the virtual three dimensional space and located at a desired position on the ground plane. A first virtual camera is placed at a first position in the virtual three dimensional space. Virtual lighting is added to the virtual three dimensional space to create shadows of the virtual model on at least the ground plane. The first virtual camera is used for rendering of the virtual model and the shadows to obtain a rendered image. The virtual model is removed and the rendered image is projected onto the ground plane. A second virtual camera is placed vertically above the projection of the rendered image on the ground plane and is used to capture the virtual three dimensional image of the projection of the rendered image on the ground plane to enable reproduction of the virtual three dimensional image on the at least one planar substrate.



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, 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).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report*