

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 April 2008 (10.04.2008)

PCT

(10) International Publication Number
WO 2008/041949 A1

(51) International Patent Classification:
G01S 7/40 (2006.01) *G01S 7/41* (2006.01)

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

(21) International Application Number:
PCT/SG2006/000295

(22) International Filing Date: 4 October 2006 (04.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **SINGAPORE TECHNOLOGIES AEROSPACE LTD**
[SG/SG]; Engineering & Development Centre, 540 Airport Road, Paya Lebar, Singapore 539938 (SG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, 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.

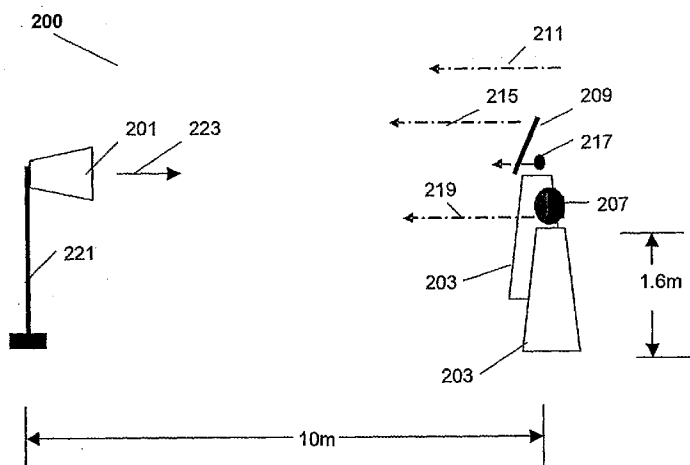
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BALAKRISHMAN, R.** [SG/SG]; 11 Hougang Ave 1, Singapore 538868 (SG). **MATITSINE, Serguei** [RU/SG]; 5 Rhu Costa, #14-11 Olivia Blk, Singapore 437434 (SG). **VEISSAL, Moustafaev** [RU/SG]; 62 Bayshore Road, #08-08 Pearl Tower, Singapore 469977 (SG). **R. Kumaran** [SG/SG]; Blk 165B, #08-169 Punggol Central, Singapore 822165 (SG).

Published:
— with international search report

(54) Title: A METHOD AND SYSTEM FOR CONDUCTING RADAR CROSS SECTION MEASUREMENTS



(57) Abstract: A method and system for conducting radar cross section measurements are provided. The method comprises the steps of positioning an active screen between a transceiver unit and a target area; periodically switching the active screen between an OPEN position in which the active screen is electromagnetically transparent and a CLOSE position in which the active screen is electromagnetically opaque; transmitting electromagnetic signals towards the target area utilising the transceiver unit; measuring a first received signal when the active screen is in the OPEN position; measuring a second received signal when the active screen is in the CLOSE position; and deriving a target signature based on the measured first and second received signals; wherein a frequency of the switching of the active screen is chosen such that respective background components in the first and second received signals are substantially constant.

WO 2008/041949 A1