

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
14 September 2006 (14.09.2006)

PCT

(10) International Publication Number
WO 2006/096352 A3

(51) International Patent Classification:
G06K 9/00 (2006.01) **G06K 9/32** (2006.01)

(21) International Application Number:
PCT/US2006/006716

(22) International Filing Date:
27 February 2006 (27.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/657,703 3 March 2005 (03.03.2005) US
60/675,476 28 April 2005 (28.04.2005) US
11/359,365 23 February 2006 (23.02.2006) US

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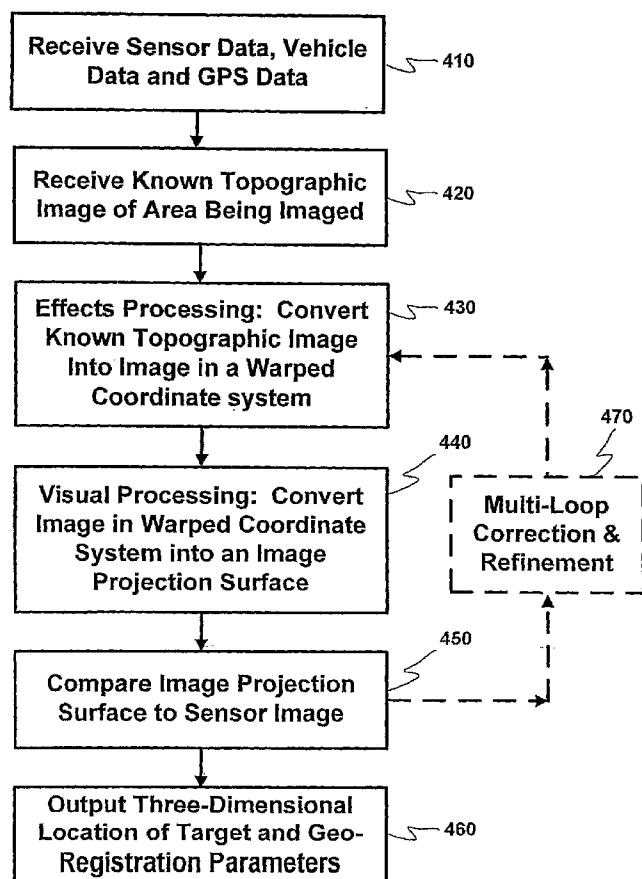
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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),

[Continued on next page]

(54) Title: AN APPARATUS AND METHOD FOR SIMULATED SENSOR IMAGERY USING FAST GEOMETRIC TRANSFORMATIONS



(57) Abstract: The invention pertains generally to image processing. More specifically, the invention relates to the processing of sensor imagery using generated imagery. Embodiments of the invention include receiving sensor data, vehicle data, GPS data and accessing a database to obtain a pre-stored image of a target area. The pre-stored image of the target area may then be pre-processed by transforming the image into a warped coordinate system (430) and adding visual effects to create projection image of the target area. The projection image may then be compared to a current image of the target area (450) to determine a three-dimensional location of a target located in the target area (460). Additional embodiments the invention include the use of a feedback loop for refinement and correction of results and/or the use of parallel processors to speed processing.

WO 2006/096352 A3



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).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
21 December 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/06716

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G06K 9/00,9/32**

USPC: 382/103,294

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 382/103, 294, 104, 217, 348/140, 342/25R

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST (USPAT, US-PUPUB, EPO, JPO, DERWENT, IBM_TDB, USOCR, FPRS), IEEE Xplore

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 20030218674 A1 (ZHAO et al) 27 November 2003 (27.11.2003) see form 237.	1-2, 8, 10, 14-24, 26-34 ----- 3-7, 9, 11-13, 25
Y	US 6400306 B1 (NOHARA et al) 04 June 2002 (04.06.2002), see form 237.	3-7, 25
Y	US 3602088 (SPRING) 31 August 1971 (31.08.1971), see form 237.	7
Y	US 20040169663 A1 (BERNIER) 02 September 2004 (02.09.2002) see form 237.	9, 11-13



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"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search

26 September 2007 (26.09.2007)

Date of mailing of the international search report

24 OCT 2007

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