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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR DETECTING DANGEROUS OBJECTS AND SUBSTANCES

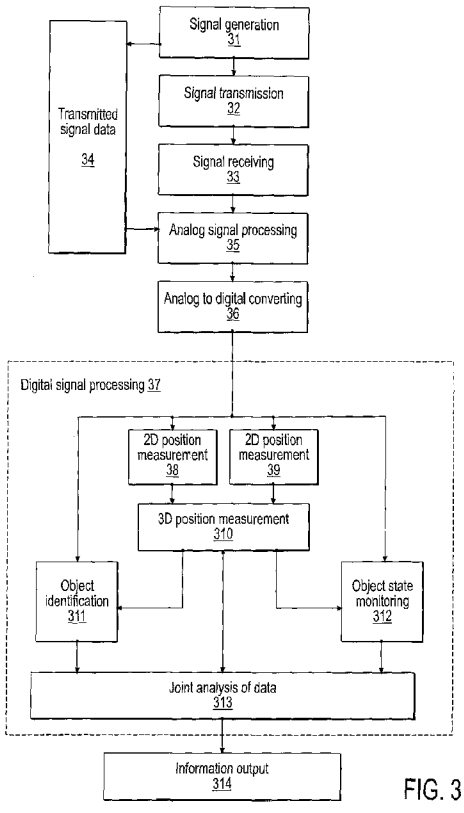

FIG. 3

(57) Abstract: A system and method for detecting dangerous objects and substances are disclosed. According to one embodiment, a method comprises generating a microwave signal that is reflected by a target to render one or more reflected signals. The one or more reflected signals are received at an antenna array. The one or more reflected signals are converted into digital reflected signals. The microwave signal is converted into a digital signal. The digital reflected signals and the digital signal are processed to determine the three dimensional position of the target. The digital reflected signals and the digital signal are processed to identify the target. The digital reflected signals and the digital signal are processed to determine a state of the target; and determine whether the target is a dangerous object.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06K 9/00 (2008.04)
USPC - 382/103
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)
USPC: 382/103

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 382/100,103,159,209

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST(USPT,PGPB) Google patent Google Scholar
Search terms used: Antenna, microwave, transmit, generate, receive, reflect, digital signal, position, identify, parallel, perpendicular, polarized

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 2005/0104603 A1 (PESCHMANN et al.) 19 May 2005 (19.05.2005) entire document, especially Fig 3, 9, para. [0002], [0071], [0069], [0074], [0078], [0082], [0108], [0114], [0146], [0186], [0188].	1-5 ---- 6-11
Y	US 7,088,290 B2 (OHNO et al.) 08 August 2006 (08.08.2006) entire document, especially col 30, ln 1-30.	6-11
Y	US 6,927,728 B2 (VOOK et al.) 09 August 2005 (09.08.2005) entire document, especially col. 2, ln 10-20.	8-11

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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