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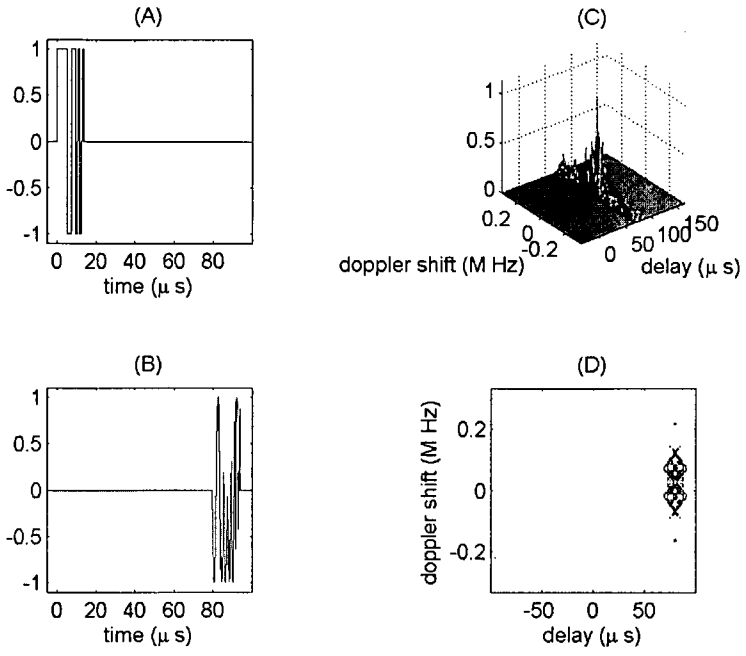
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR DETECTION AND TRACKING OF TARGETS



(57) Abstract: The present invention relates to active sensor applications, and more particularly is directed to efficient systems and methods for detection and tracking of one or more targets. The invention provides a method for receiving signals reflected from one or more targets (A), processing the received signals and the transmitted signals to compute two or more slices of the cross ambiguity function associated with the signals, and estimating the signal delay (D) and the Doppler shift (C) associated with the targets from the computed slices.

WO 2006/017265 A3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/24647

A. CLASSIFICATION OF SUBJECT MATTER
IPC: **G01S 13/72**(2006.01)

USPC: 342/95,96,97,196
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. : 342/95, 96, 97, 196, 195, 104, 109, 89, 99

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)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5808580 A (ANDREWS, JR.) 15 September 1998 (15.09.1998), see Abstract for range and Doppler ambiguity processing.	1-29

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer John B. Sotomayor Telephone No. 571-272-3600

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
EAST
search terms: slice AND (cross-ambiguity OR cross AND ambiguity) AND function AND doppler AND (compensate OR compensating OR compensation OR compensated) AND (match OR matched) AND filter