

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 January 2005 (20.01.2005)

PCT

(10) International Publication Number
WO 2005/006110 A3

- (51) International Patent Classification:
G08B 13/14 (2006.01) G07B 15/02 (2006.01)
G08B 1/08 (2006.01) H04Q 7/20 (2006.01)
G06F 17/00 (2006.01)
- (21) International Application Number:
PCT/US2004/011086
- (22) International Filing Date: 9 April 2004 (09.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/461,946 9 April 2003 (09.04.2003) US
10/821,296 8 April 2004 (08.04.2004) US
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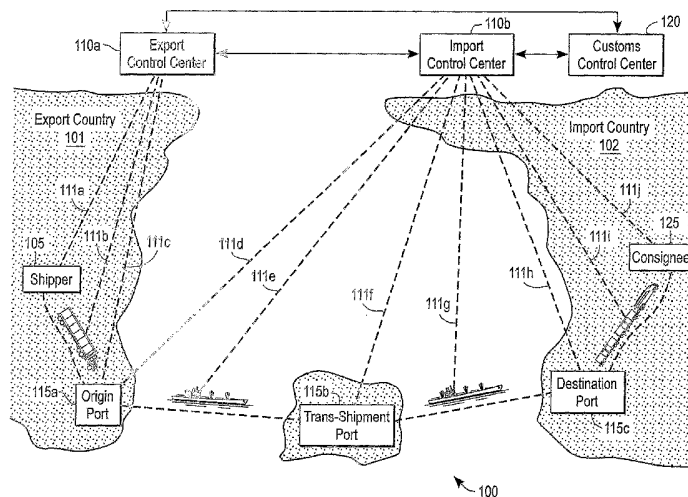
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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, 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, IT, LU, 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

(88) Date of publication of the international search report:
14 December 2006

[Continued on next page]

(54) Title: CONTINUOUS SECURITY STATE TRACKING FOR INTERMODAL CONTAINERS TRANSPORTED THROUGH A GLOBAL SUPPLY CHAIN



(57) Abstract: A control center (110) continuously monitors a security state of a container through an extended network spanning from a shipper to a consignee. Control center (11) changes the security state responsive to explicit information received from a trusted agent, or implicit information detected from business logic. Trusted monitor agents continuously track the security state from the shipper checkpoint to the origin checkpoint to a destination checkpoint. A trusted consignee agent sends termination information from the consignee checkpoint to the data center. The checkpoints further comprise site managers (410) to communicate information gathered by RFID from tags on containers to the control center (110).

WO 2005/006110 A3



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/US04/11086

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **G08B 13/14**(2006.01);**1/08**(2006.01);**G06F 17/00**(2006.01);**G07B 15/02**(2006.01);**H04Q 7/20**(2006.01)
 G08B 13/14(2006.01),1/08(2006.01);G06G 17/00;G07B 15/02(2006.01);H04Q 7/20(2006.01)
 USPC: 340/572.1,572.8,539.13,568.1,571;235/375,384,385;455/456.5,456.6
 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. : 340/572.1, 572.8, 539.13, 568.1, 571; 235/375, 384, 385; 455/456.5, 456.6

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,750,197 A (DENEKAMP et al.), 07 June 1988	
A	US 4,688,244 A (HANNON et al.), 18 August 2987	

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

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search: 07 August 2006 (07.08.2006)
 Date of mailing of the international search report: 08 SEP 2006

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
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/11086

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
 2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees.
 3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

 4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-28
- Remark on Protest**
- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
 - The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
 - No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/11086

BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-28, drawn to apparatus and method claims using claimed apparatus.

Group II, claim(s) 29-36, drawn to computer product.

The inventions listed as Groups I do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: invention group II claims a computer product which is a different special technical feature product and operated in conjunction with the apparatus.