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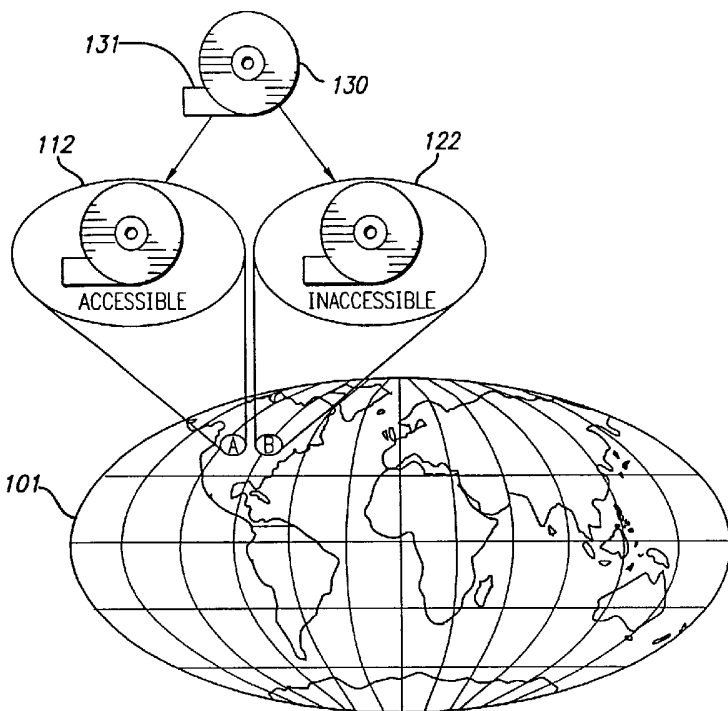
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(54) Title: SYSTEM AND METHOD FOR USING LOCATION IDENTITY TO CONTROL ACCESS TO DIGITAL INFORMATION



(57) Abstract: A method and apparatus for controlling access to digital information utilizes a location identity attribute that defines a specific geographic location. The location identity attribute is associated with the digital information such that the digital information can be accessed only at the specific geographic location. The location identity attribute further includes a location value and a proximity value. The location value corresponds to a location of an intended recipient appliance of the digital information, and may be further defined in terms of latitude, longitude and altitude dimensions. The location identity attribute is enforced by allowing access to the digital information only at the specific geographic location. As a first part of this enforcement process, the location of an appliance through which access to the digital information is sought is identified. The appliance location is then compared to the specific geographic location defined by the location identity attribute, and access to the digital information is allowed only if the appliance location falls within the specific geographic location. There are many ways to identify the location of the appliance, including: (1) re-

solving the appliance location from a street address for the appliance; (2) retrieving the appliance location from a file stored within the appliance; (3) recovering the appliance location from a GPS receiver embedded in the appliance; and (4) recovering the appliance location by triangulating RF signals received by the appliance.



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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.

INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F1/00 G01S5/14

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)

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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 practical, search terms used)

EPO-Internal, PAJ, IBM-TDB, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	EP 0 997 808 A (DATUM INC) 3 May 2000 (2000-05-03) abstract paragraph '0001! paragraph '0004! page 2, line 21 - line 24 page 3, line 15 page 3, line 17 - line 18 paragraph '0023! ---	1-16, 26, 28-43, 53 21-23, 48-50
X	US 6 046 689 A (NEWMAN BRYAN) 4 April 2000 (2000-04-04) column 4, line 27 - column 5, line 34 figure 1 abstract figure 2A ---	1, 27, 28, 54
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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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

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"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

"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.

"&" document member of the same patent family

Date of the actual completion of the international search

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 922 073 A (SHIMADA KAZUTOSHI) 13 July 1999 (1999-07-13) abstract column 2, line 1 - line 5 column 4, line 8 - line 17 figure 2 ---	21-23, 48-50
A	US 6 057 779 A (BATES BENJAMIN G) 2 May 2000 (2000-05-02) abstract column 1, line 42 - line 46 column 1, line 61 - column 2, line 16 ---	1-16, 28-43
A	WO 00 27143 A (SIGNALSOFT CORP) 11 May 2000 (2000-05-11) abstract page 3, line 16 - line 23 page 7, line 9 - line 22 page 7, line 30 - line 32 ---	13-16, 40-43
X	US 4 418 425 A (FENNEL JR JOHN W ET AL) 29 November 1983 (1983-11-29) abstract figure 5 column 5, line 33 - line 40 column 5, line 52 - line 59 ---	17-20, 44-47
X	US 5 640 452 A (MURPHY MICHAEL D) 17 June 1997 (1997-06-17) column 7, line 26 - line 29 column 7, line 52 - line 54 column 7, line 60 - line 65 column 8, line 49 - line 53 column 9, line 10 - line 13 ---	25, 52
X	WO 99 51038 A (PICCIONELLI GREG A ;RITTMASER TED R (US)) 7 October 1999 (1999-10-07) page 3, line 18 - line 33 page 8, line 24 - page 9, line 5 -----	24, 51

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/48076

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional 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 an additional fee, this Authority did not invite payment of any additional fee.
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.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-16,21-23,26-27,28-43,48-50,53-54

Digital information access control by associating with the information a geographic location attribute so as to make information only accessible in specific geographic locations. The location attribute is integrated with the digital information and the geographic location is retrieved via several methods.

2. Claims: 17-20,44-47

Digital information access control by associating with the information a geographic location attribute so as to make information only accessible in specific geographic locations. The digital information is encrypted with a key partially based in the geographic location.

3. Claims: 24,51

Digital information access control by associating with information a geographic location attribute so as to make information only accessible in specific geographic locations. Information location attribute is enforced by allowing retrieval in the specific geographic location.

4. Claims: 25,52

Digital information access control by associating with information a geographic location attribute so as to make information only accessible in specific geographic locations. Information location attribute is enforced by allowing information display in the specific geographic location.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/48076

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