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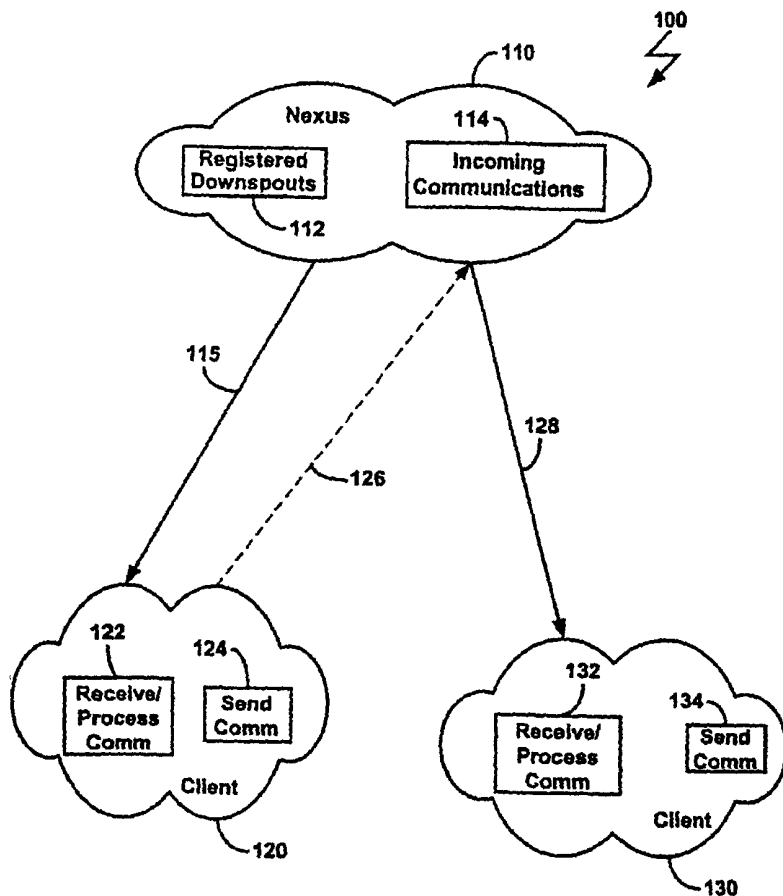
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(54) Title: SECURE COMPUTER MAINTENANCE SYSTEM



(57) Abstract: A system maintains a first computer using a second computer and a central computer by: receiving a request for maintenance from a first computer; opening first and second secured connections to the first and second computers through the central computer; transferring a request for data from the second computer; storing data and a destination instruction sent from the second computer in a central computer buffer; and forwarding the buffered data to the first computer. In response to the request, program can be executed on the first computer for maintenance tasks, as for example: collecting and transmitting data, analysing and repairing configuration, downloading and installing software updates.



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patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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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**

|  |
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| national Application No<br>PCT/US 00/30083 |
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**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 H04L29/06

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)  
IPC 7 H04L G06F

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, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
|------------|--|-----------------------|

|   |   |                                       |
|---|---|---------------------------------------|
| X | US 5 960 177 A (TANNO KAZUHIRA)<br>28 September 1999 (1999-09-28)<br><br>figures 6,10<br>column 1, line 7 - line 15<br>column 3, line 38 - line 67<br>column 5, line 20 -column 12, line 3<br>column 13, line 59 - line 67<br>column 14, line 29 -column 16, line 8<br>column 17, line 18 -column 19, line 23 | 1,2,4,5,<br>10,<br>12-14,<br>16,17,22 |
| Y | ---   | 3,6-9,<br>11,15,<br>18-21,23          |
|   | -/--  |                                       |

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  | *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 document but 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  |   |

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| Date of the actual completion of the international search<br><b>30 July 2001</b> | Date of mailing of the international search report<br><b>08. 08. 2001</b> |
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| Name and mailing address of the ISA<br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040. Tx. 31 651 epo nl<br>Fax: (+31-70) 340-3016 | Authorized officer<br><b>Sigolo, A</b> |
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INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 00/30083

| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |   |                       |
|--|---|-----------------------|
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
| Y  | EP 0 713 311 A (MILKYWAY NETWORKS CORP)<br>22 May 1996 (1996-05-22)<br>abstract; figures 1,4<br>page 3, line 48 -page 4, line 53<br>page 6, line 40 -page 7, line 10    | 3,15                  |
| A  |   | 1,2,4,<br>12-14,16    |
| Y  | US 5 678 002 A (BLOMFIELD-BROWN<br>CHRISTOPHER ET AL)<br>14 October 1997 (1997-10-14)<br>column 1, line 50 -column 2, line 17<br>column 10, line 51 -column 12, line 44 | 6-9,<br>18-21         |
| Y  | EP 0 738 961 A (FUJI XEROX CO LTD)<br>23 October 1996 (1996-10-23)<br>column 4, line 3 - line 14<br>column 7, line 35 -column 82, line 2                                | 11,23                 |

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/30083

**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: 1-5,10,12-17,22

System for maintaining a user computer using a second computer by means of an intermediate central computer characterized in that the secured connection between the first and the central computer remains open without network traffic.

2. Claims: 6-9,18-21

System for maintaining a user computer using a second computer by means of an intermediate central computer where a process is spawned on the first computer in response of a maintenance request, characterized in that the process is used for collecting user data or for performing diagnostic or repairing service at the client.

3. Claims: 11,23

System for maintaining a user computer using a second computer by means of an intermediate central computer, characterized in that the first or the second computer reestablishes a connection with the central computer in case the connection is interrupted.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/US 00/30083

| Patent document cited in search report |   | Publication date |    | Patent family member(s) | Publication date |
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| US 5960177                             | A | 28-09-1999       | JP | 8314835 A               | 29-11-1996       |
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