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(81) Designated States (unless otherwise indicated, for every  
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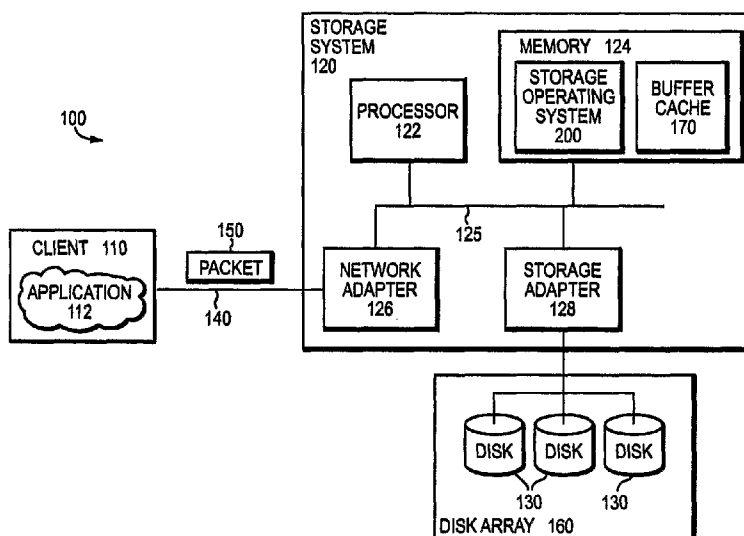
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31 May 2007

[Continued on next page]

(54) Title: CONTROL OF SERVICE WORKLOAD MANAGEMENT



(57) Abstract: A system and method are provided to manage different types of workload. The method comprises receiving a request, determining a class of the request, determining a priority level associated with the class of the request, and servicing the request utilizing the priority level of the class of the request. The class of the request may be associated with a target volume, as well as with a network protocol, or with a network port.



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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  
PCT/US2006/024541

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. G06F9/50

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)  
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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>MOKBEL M F ET AL: "Scalable multimedia disk scheduling" DATA ENGINEERING, 2004. PROCEEDINGS. 20TH INTERNATIONAL CONFERENCE ON BOSTON, MA, USA 30 MARCH - 2 APRIL 2004, PISCATAWAY, NJ, USA, IEEE, 30 March 2004 (2004-03-30), pages 498-509, XP010714130 ISBN: 0-7695-2065-0 abstract page 498, left-hand column, line 1 - page 499, left-hand column, last line page 500, left-hand column, line 16 - line 37 page 500, right-hand column, paragraph 3. - page 502, left-hand column, paragraph 3.2</p> <p style="text-align: center;">----- -/--</p>	1-16,20

☒ 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

\*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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\* & \* document member of the same patent family

Date of the actual completion of the international search

1 March 2007

Date of mailing of the international search report

15/03/2007

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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2006/024541

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 2 121 995 A (HITACHI LTD) 4 January 1984 (1984-01-04) abstract page 5, line 15 - line 44 claims 4,5	1
A	CUNEYT AKINLAR ET AL: "A Scalable Bandwidth Guaranteed Distributed Continuous Media File System Using Network Attached Autonomous Disks" IEEE TRANSACTIONS ON MULTIMEDIA, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 5, no. 1, March 2003 (2003-03), pages 71-96, XP011076515 ISSN: 1520-9210 abstract	
X	AREF W G ET AL: "An inexpensive, scalable, and open-architecture media server" INTERNET TECHNOLOGIES AND SERVICES, 1999. PROCEEDINGS. FIRST IEEE/POPOV WORKSHOP ON 25-28 OCTOBER 1999, PISCATAWAY, NJ, USA, IEEE, 25 October 1999 (1999-10-25), pages 36-43, XP010514301 ISBN: 0-7803-5985-2 page 36, left-hand column, line 22 - right-hand column, line 24 page 38, left-hand column, paragraph 2.1. - right-hand column, last line page 40, left-hand column, line 1 - line 33 page 41, left-hand column, line 3 - last line	17-19
X	US 5 276 867 A (KENLEY GREGORY [US] ET AL) 4 January 1994 (1994-01-04) abstract column 2, line 33 - line 55 column 3, line 40 - column 4, line 17 column 4, line 47 - line 53 column 16, line 60 - column 17, line 4	17
A	DIMITRIJEVIC Z., RANGASWAMI, R.: "Quality of service support for real-time storage systems" INTERNATIONAL IPSI-2003, 2003, pages 1-8, XP002422779 abstract page 2, left-hand column, paragraph II. - page 4, left-hand column, paragraph III.	17-19

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2006/024541

### Box 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 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:

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: 1-16,20

The first invention, as defined by independent claims 1, 15 and 20 discloses the reception of requests which are serviced according to their associated class and priority.

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2. claims: 17-19

The second invention, as defined by independent claim 17 discloses a file system containing hierarchically structured data in an array of storage devices and servicing requests directed to said file system.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/024541

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2121995	A	04-01-1984	DE 3318517 A1	02-02-1984
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US 5276867	A	04-01-1994	NONE	
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