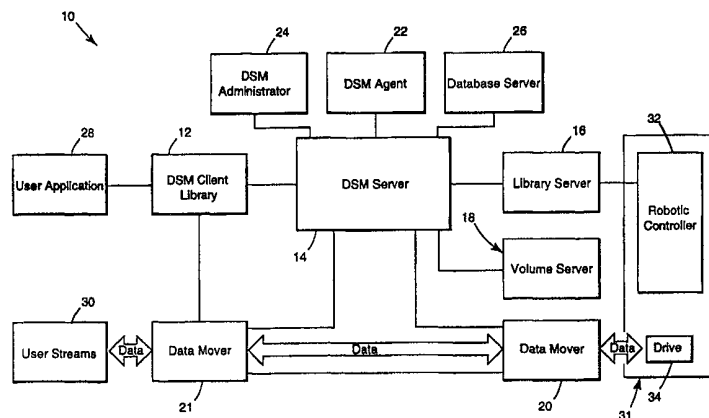


## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>7</sup> :</b> <b>G06F 17/30</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 00/04483</b> <b>(43) International Publication Date:</b> 27 January 2000 (27.01.00)
<b>(21) International Application Number:</b> PCT/US99/16051 <b>(22) International Filing Date:</b> 15 July 1999 (15.07.99)  <b>(30) Priority Data:</b> 60/092,853      15 July 1998 (15.07.98)      US  <b>(71) Applicant:</b> IMATION CORP. [US/US]; 1 Imation Place, P.O. Box 64898, Saint Paul, MN 55164-0898 (US).  <b>(72) Inventor:</b> SITKA, Larry, R.; P.O. Box 64898, Saint Paul, MN 55164-0898 (US).  <b>(74) Agents:</b> BAUER, William, D. et al.; Imation Legal Affairs, P.O. Box 64898, Saint Paul, MN 55164-0898 (US).		<b>(81) Designated States:</b> JP, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 29 June 2000 (29.06.00)

**(54) Title:** HIERARCHICAL DATA STORAGE MANAGEMENT



**(57) Abstract**

A system and method for managing the storage of files within an HSM system incorporate an architecture and methodology that facilitate the storage and retrieval of large image files as part of an overall image processing workflow. In particular, the system and method may find ready application in a workflow that involves the processing of groups of images associated with particular customers, projects, or transactions, and may act as a storage server for a client application that implements the workflow. The system and method may be useful, for example, in handling the storage of images uploaded from scanned photographic film, or digital images submitted to a photo-processing shop by amateur or professional photographers. In this case, the client application can be a photo-processing application that could provide for various media formats, sizes, and quantities of image reproductions for a consumer. As another example, the system and method may be useful in handling the storage of medical diagnostic images associated with a particular medical patient or study. In this case, the client application could be a picture archival communication system (PACS) that manages the archival of imagery for viewing by physicians. Further, the system and method may be useful in handling the storage of images associated with particular printing jobs, e.g., for publishers, advertising customers, and the like. In this case, the client application could be a digital prepress workflow application.

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/16051

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F17/30

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 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)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 474 395 A (IBM) 11 March 1992 (1992-03-11) page 4, line 45 -page 5, line 4 ---	1,6,7
A	"GRAPHICAL USER INTERFACE FOR THE DISTRIBUTED COMPUTING ENVIRONMENT" IBM TECHNICAL DISCLOSURE BULLETIN, vol. 38, no. 1, 1 January 1995 (1995-01-01), page 409/410 XP000498815 ISSN: 0018-8689 page 409, line 27 - line 29 --- -/--	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

5 November 1999

Date of mailing of the international search report

10.04.00

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/16051

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>"HIERARCHICAL VIEW OF FILESETS"            IBM TECHNICAL DISCLOSURE BULLETIN,            vol. 36, no. 5, 1 May 1993 (1993-05-01),            page 167 XP000408950            ISSN: 0018-8689            the whole document            -----</p>	1

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 99/16051

### 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:

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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.:

1-7

#### 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**

1. Claims: 1-7

Storage management method for files sharing common attributes

2. Claims: 8-12

Storage management method for files and corresponding file  
metadata

3. Claims: 13-18

Method for storing images files on a hierarchy of data  
storage media

4. Claims: 19-20

Web-based hierarchical storage management system

## INTERNATIONAL SEARCH REPORT

Information on patent family members

Internal Application No

PCT/US 99/16051

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0474395    A	11-03-1992	US    5239647 A JP    6318168 A	24-08-1993 15-11-1994
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