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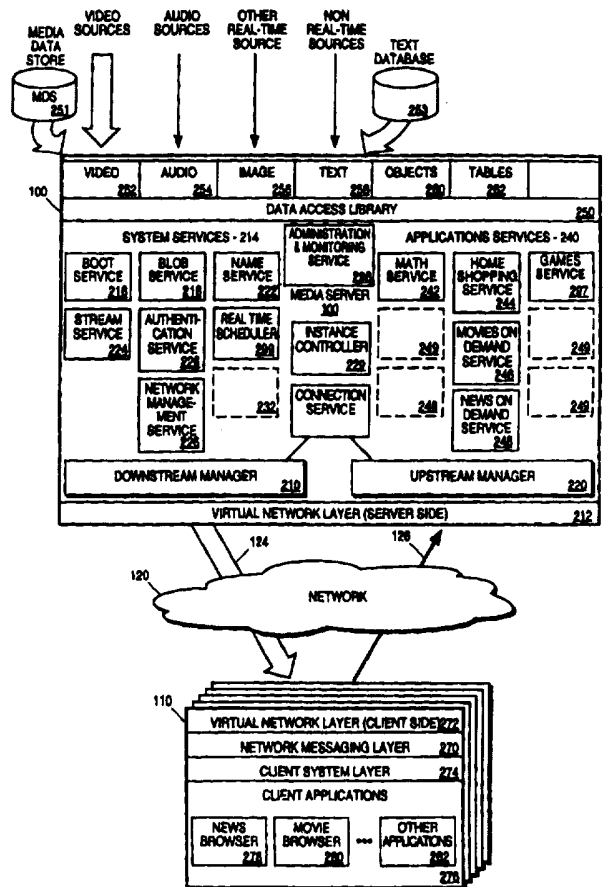
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <p>(51) International Patent Classification ⁶ : H04L 29/06</p> | <p>A3</p> | <p>(11) International Publication Number: WO 96/17306 (43) International Publication Date: 6 June 1996 (06.06.96)</p> |
| <p>(21) International Application Number: PCT/US95/15279 (22) International Filing Date: 21 November 1995 (21.11.95) (30) Priority Data: 08/343,762 21 November 1994 (21.11.94) US (71) Applicant: ORACLE CORPORATION [US/US]; 500 Oracle Parkway, Redwood Shores, CA 94065 (US). (72) Inventors: LAURSEN, Andrew; 324 Seville Way, San Mateo, CA 94402 (US). OLKIN, Jeffrey, C.; 243 Buena Vista Avenue, No. 606, Sunnyvale, CA 94086 (US). PORTER, Mark, A.; 350 Allen Road, Woodside, CA 94062 (US). NAZEM, Farzad; 6 Beresford Place, Redwood City, CA 94061 (US). BAILEY, William; 564 Forest Avenue, Palo Alto, CA 94301 (US). MOORE, Mark; 203 Rock Harbor Lane, Foster City, CA 94404 (US). (74) Agents: SALTER, James, H. et al.; Blakely, Sokoloff, Taylor & Zafman, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025-1026 (US).</p> | | <p>(81) Designated States: CA, CN, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 17 October 1996 (17.10.96)</p> |

(54) Title: MEDIA SERVER

(57) Abstract

An improved system and method for providing multimedia data in a networked system is disclosed. The present invention provides a platform of distributed client-server computing and access to data over asymmetric real-time networks (120). A service mechanism allows applications to be split such that client devices (110) (set-top boxes, personal digital assistants, etc.) can focus on presentation, while back-end services running in a distributed server complex (100), provide access to data via messaging across an abstracted interface.



* (Referred to in PCT Gazette No. 41/1996, Section II)

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INTERNATIONAL SEARCH REPORT

International Application No
PC/US 95/15279

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 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 6 H04L

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,A,0 529 864 (SUN MICROSYSTEMS) 3 March 1993 see page 2, line 29 - page 3, line 2 see page 5, line 8 - page 7, line 55 see figures 2,4,5,7,8 | 1,2,4 |
| Y | WO,A,94 01964 (BELL ATLANTIC NETWORK SERVICES) 20 January 1994 see page 8, line 12 - page 12, line 2 see page 12, line 16 - page 17, line 13 see page 22, line 22 - page 23, line 33 see figure 1 | 3 |
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Patent family members are listed in annex.

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| Date of the actual completion of the international search 20 May 1996 | Date of mailing of the international search report 31.05.96 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl, Fax (+ 31-70) 340-3016 | Authorized officer Canosa Areste, C |

INTERNATIONAL SEARCH REPORT

International Application No

PC/US 95/15279

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,A,0 332 148 (HONEYWELL) 13 September 1989 see page 2, line 51 - page 3, line 10 see page 3, line 32 - line 40 see page 4, line 28 - page 5, line 5 see page 5, line 17 - line 29 see abstract --- | 3 |
| A | US,A,4 642 758 (A.Y.TENG) 10 February 1987 see column 7, line 5 - column 8, line 5 see figures 2,10 --- | 3 |
| P,X | WO,A,95 12947 (DIGITAL EQUIPMENT CORP.) 11 May 1995 see page 4, line 11 - page 5, line 5 see page 6, line 1 - page 11, line 8 see figures 1,2 ----- | 3 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US 95/15279

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|--------------------------------|----------------------|
| EP-A-529864 | 03-03-93 | JP-A- 6236330 US-A- 5442749 | 23-08-94 15-08-95 |
| ----- | ----- | ----- | ----- |
| WO-A-9401964 | 20-01-94 | AU-B- 4543593 | 31-01-94 |
| ----- | ----- | ----- | ----- |
| EP-A-332148 | 13-09-89 | US-A- 5012409 JP-A- 1316831 | 30-04-91 21-12-89 |
| ----- | ----- | ----- | ----- |
| US-A-4642758 | 10-02-87 | NONE | |
| ----- | ----- | ----- | ----- |
| WO-A-9512947 | 11-05-95 | AU-B- 8120394 EP-A- 0688485 | 23-05-95 27-12-95 |
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