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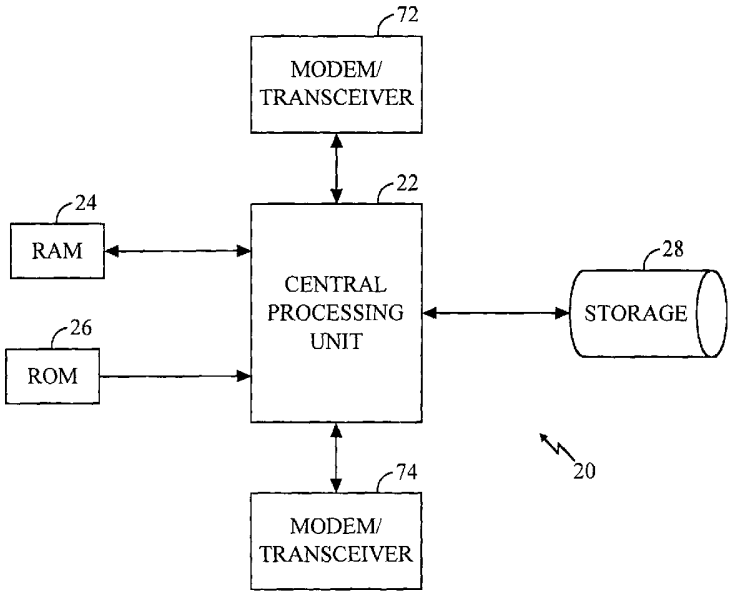
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(54) Title: SYSTEM AND METHOD FOR MAINTAINING OBJECT DATA IN A DISTRIBUTED OBJECT SYSTEM



(57) Abstract: A system for maintaining a distributed object system using a network. Data objects are maintained at a network controller and are each associated with a data object version sequence number (OVSN), indicating a state, version, or configuration of each data object. When a receiver transmits a message to the network controller, the message includes an OVSN, representing a state, version, or configuration of objects located at the receiver, so the network controller can interpret the message in accordance with the OVSN contained in the message. The network controller may update the receiver's data objects if necessary.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L12/18

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 H04Q

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	EP 0 876 029 A (SONY CORP) 4 November 1998 (1998-11-04)	1-7, 14-19, 21,22,26
Y	abstract; figure 1	8,20,23, 25,29,30
A	column 8, line 3 -column 11, line 18 column 14, line 7 - line 48; figures 7A,7B column 17, line 7 - line 50; figure 10 column 19, line 32 -column 21, line 19 column 24, line 15 - line 36 --- -/--	9-13,24, 27,28,31

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
25 November 2002	04/12/2002

Name and mailing address of the ISA	Authorized officer
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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.
X	WO 00 62495 A (GLENAYRE ELECTRONICS INC) 19 October 2000 (2000-10-19)	1-4,6,7, 14,15, 18,20, 21,26
Y	abstract; figure 4	8,20,25
A	page 25, line 17 -page 26, line 21	5,9-13, 16,17, 19, 22-24, 27-31
Y	US 5 832 394 A (WORTHAM LARRY C) 3 November 1998 (1998-11-03) cited in the application	23,29,30
A	column 2, line 48 - line 59; figure 1 column 4, line 56 -column 5, line 26; figure 3	1-22, 24-28,31

INTERNATIONAL SEARCH REPORT

Information on patent family members

tional Application No
.../US 02/16232

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0876029 A	04-11-1998	JP 10303983 A	13-11-1998
		EP 0876029 A2	04-11-1998
		US 6370143 B1	09-04-2002
WO 0062495 A	19-10-2000	US 6269080 B1	31-07-2001
		AU 4338000 A	14-11-2000
		WO 0062495 A1	19-10-2000
US 5832394 A	03-11-1998	US 5652707 A	29-07-1997
		US 5519621 A	21-05-1996
		US 5513111 A	30-04-1996
		US 5398190 A	14-03-1995
		US 5299132 A	29-03-1994
		US 5155689 A	13-10-1992
		US 5884221 A	16-03-1999
		US 6148202 A	14-11-2000
		US 6009330 A	28-12-1999
		US 5734981 A	31-03-1998
		AT 192597 T	15-05-2000
		AT 227872 T	15-11-2002
		DE 69132158 D1	08-06-2000
		EP 0501058 A2	02-09-1992
		EP 0744727 A2	27-11-1996
		NO 912516 A ,B,	20-01-1992
		NO 963257 A	20-01-1992