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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR CACHING IN A NETWORKED ENVIRONMENT

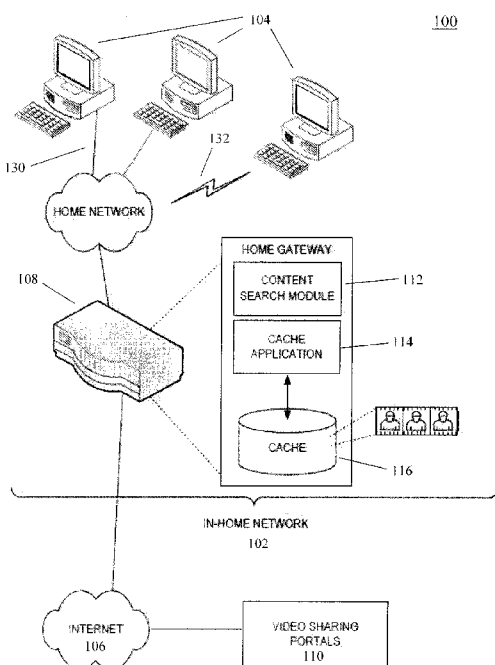


FIG. 1

(57) Abstract: In general, methods and apparatus according to the invention mitigate these and other issues by implementing caching techniques described herein. So when one device in a home network downloads and plays a particular content (e.g., a video, song) from a given site, the content is cached within the network such that the same content is available to be re-played on another device without re-downloading the same content from the Internet.

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A. CLASSIFICATION OF SUBJECT MATTER**G06Q 50/10(2012.01)i, G06F 12/08(2006.01)i**

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)

G06Q 50/10; G06F 15/16; G06F 9/445; H04W 4/00; H04B 1/40; G06F 12/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: cache, network, download, content

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 7814483 B2 (LI JUN et al.) 12 October 2010 See abstract and claims 1,17,26.	1-3,21 4-6,14,16,19-20,28 ,29-33 7-13,15,17-18 ,22-27
Y	US 7299271 B2 (SHINOBU SATO) 20 November 2007 See abstract and claims 4,12.	4-6,20,28,33
Y	US 6917960 B1 (DAN S. DECASPER et al.) 12 July 2005 See column 6, lines 39-59 and claims 1,3-4,11-12.	14,16,19,29-33
A	KR 10-2005-0119400 A (PANTECH CO., LTD.) 21 December 2005 See abstract and claim 1.	1-33



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7814483 B2	12.10.2010	AU 2003-287497 A1	06.06.2004
		AU 2003-287497 A8	06.06.2005
		BR 0318584 A	10.10.2006
		CN 1879081 A	13.12.2006
		CN 1879081 B	13.07.2011
		EP 1697833 A2	06.09.2006
		JP 2007-521541 A	02.08.2007
		KR 10-2006-0097122 A	13.09.2006
		US 2007-0089110 A1	19.04.2007
		WO 2005-048011 A2	26.05.2005
		WO 2005-048011 A3	26.05.2005
US 7299271 B2	20.11.2007	JP 2003-177996 A	27.06.2003
		JP 3812727 B2	23.08.2006
		US 2003-0110214 A1	12.06.2003
US 6917960 B1	12.07.2005	US 2007-0192474 A1	16.08.2007
		US 7035907 B1	25.04.2006
KR 10-2005-0119400 A	21.12.2005	None	