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(71) Applicant (for all designated States except US): **REAL-NETWORKS, INC.** [US/US]; 2601 Elliott Avenue, Seattle, WA 98121 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHASEN, Jeffrey, M.** [US/US]; 14635 NE 57th Street, Bellevue, WA 98007 (US). **WYMAN, Christopher, N.** [US/US]; 2019 McGilvra Blvd. E., Seattle, WA 98112 (US).

(74) Agent: **ISRAELSEN, Ned, A.**; Knobbe, Martens, Olson & Bear, LLP, 16th Floor, 620 Newport Center Drive, Newport Beach, CA 92660 (US).

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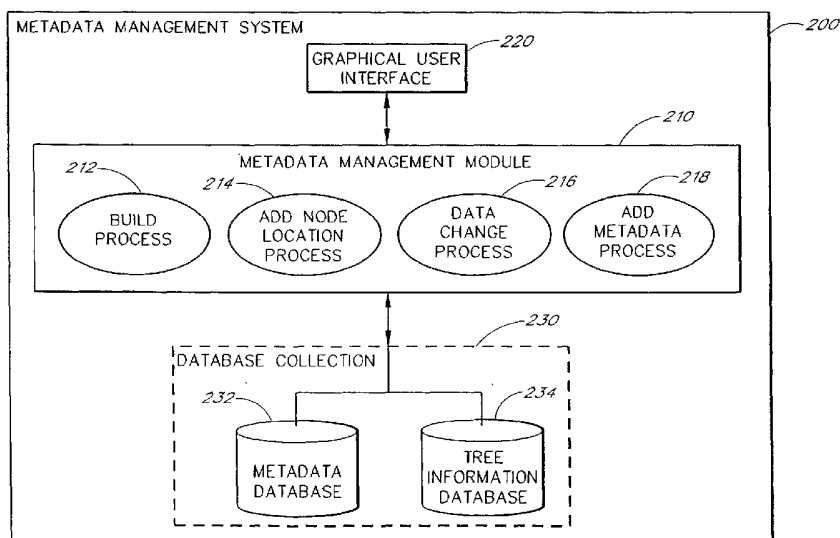
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(54) Title: SYSTEM AND METHOD OF MANAGING METADATA



(57) **Abstract:** A system and method of the present invention allow users to access, manage, and edit information about content data, often referred to as metadata. Metadata is collected from various sources, added, and maintained in a metadata database (232). In addition, metadata is dynamically read from the metadata database (232) and dynamically displayed in a graphical user interface (220) in an organized manner, such as a hierarchical tree. In the graphical user interface (220), a user may add (218), delete (216), and/or modify the metadata (216). As the user changes the metadata, the metadata database (232) is updated and the user's changes are propagated throughout the graphical user interface (220) such that the hierarchical tree displays the changed metadata.

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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
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A. CLASSIFICATION OF SUBJECT MATTER
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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)

EPO-Internal, WPI Data, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>PACHET F ET AL: "A combinatorial approach to content-based music selection" MULTIMEDIA COMPUTING AND SYSTEMS, 1999. IEEE INTERNATIONAL CONFERENCE ON FLORENCE, ITALY 7-11 JUNE 1999, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 7 June 1999 (1999-06-07), pages 457-462, XP010342822 ISBN: 0-7695-0253-9 abstract page 458, left-hand column, line 25 -page 458, left-hand column, line 44 page 458, right-hand column, line 51 -page 460, right-hand column, line 17 --- -/--</p>	<p>1,3-10, 12-18,23</p>



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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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

Boyadzhiev, Y

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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	<p>US 5 862 325 A (MUSERO STEVEN MARK ET AL) 19 January 1999 (1999-01-19)</p> <p>column 8, line 5 -column 9, line 29 column 21, line 63 -column 22, line 27 column 28, line 48 -column 29, line 41 column 30, line 31 -column 30, line 46 column 35, line 26 -column 36, line 12</p> <p>---</p>	1,8, 12-14, 17,18,23
A	<p>WAUGH A: "Specifying metadata standards for metadata tool configuration" COMPUTER NETWORKS AND ISDN SYSTEMS, NORTH HOLLAND PUBLISHING. AMSTERDAM, NL, vol. 30, no. 1-7, 1 April 1998 (1998-04-01), pages 23-32, XP004121443 ISSN: 0169-7552 abstract page 24, right-hand column, line 16 -page 25, left-hand column, line 10 page 29, right-hand column, line 17 -page 30, left-hand column, line 16</p> <p>---</p>	1-23
A	<p>WOLD E ET AL: "Content-based classification, search, and retrieval of audio" IEEE MULTIMEDIA, IEEE COMPUTER SOCIETY, US, vol. 3, no. 3, 1996, pages 27-36, XP002154735 ISSN: 1070-986X abstract page 32, right-hand column, line 33 -page 34, right-hand column, line 36</p> <p>---</p>	1-23
A	<p>BEARD M K ET AL: "Multilevel and graphical views of metadata" RESEARCH AND TECHNOLOGY ADVANCES IN DIGITAL LIBRARIES, 1998. ADL 98. PROCEEDINGS. IEEE INTERNATIONAL FORUM ON SANTA BARBARA, CA, USA 22-24 APRIL 1998, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 22 April 1998 (1998-04-22), pages 256-265, XP010276895 ISBN: 0-8186-8464-X abstract page 257, left-hand column, line 33 -page 257, left-hand column, line 56 page 262, right-hand column, line 16 -page 264, right-hand column, line 14</p> <p>-----</p>	1-23

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int al Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5862325	A	19-01-1999	US 6044205 A 28-03-2000
			AU 702509 B2 25-02-1999
			AU 2193597 A 16-09-1997
			CA 2247498 A1 04-09-1997
			EP 0954782 A1 10-11-1999
			US 2002095454 A1 18-07-2002
			WO 9732251 A1 04-09-1997
			US 6088717 A 11-07-2000
			US 6345288 B1 05-02-2002
