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Rapport de veille technologique

- Recherche de brevets -

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RECHERCHE BREVETS

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RECHERCHE BREVETS

SOURCES

http://www.inpi.fr	**Institut National de la Propriété Industrielle (brevets français)** Rubrique : Base de données des brevets (antériorité : 2 ans)
http://ep.espacenet.com	**European Patent Office** Rubrique: Worldwide - 30 million de documents
http://www.uspto.gov	**United States Patent and Trademark Office** Rubriques: Patents – search patents - Issued Patents (full-text since 1976, full-page images since 1790) ou Patent Applications (published since 15 March 2001)
http://www.jpo.go.jp	**Japan Patent Office** Rubriques : Industrial Property Digital Library (IPDL) – Patent & Utility Model - PAJ

PRESENTATION

La consultation de ces différents sites a permis une couverture internationale des brevets en la matière, ainsi que des recoupements entre ces brevets.

Voici les résultats de cette recherche, après une sélection assez rigoureuse, étant donné le nombre de réponses obtenues.

Ces résultats se veulent couvrir de manière très large les différents points pouvant toucher au projet.
La majeure partie ne porte, en effet, que sur un aspect précis du projet (concept ou technique).
Le but est ici, d'avoir un aperçu, le plus complet possible, de l'avancement des travaux en la matière et de pouvoir, éventuellement, s'inspirer de certains d'entre eux.

Les brevets sont présentés avec leurs références de publication (numéro, pays, inventeur, déposant…), le titre et le résumé présentant l'invention.

Les documents sont classés par thèmes (ils peuvent cependant être concernés par plusieurs d'entre eux). Les requêtes sont précisées pour chaque thème. Afin de cibler la recherche et d'en restreindre les résultats, elles ont été couplées avec le symbole de la Classification Internationale des Brevets qui s'est avéré le plus proche du projet: G06F17/30, soit « recherche documentaire, structures des données à cet effet ».

RESULTATS

Aide au travail sur l'information scientifique:

Requête : scientific information retrieval

Système à accès Internet permettant le stockage, l'extraction et l'analyse de données fondés sur un protocole de répertoire

Numéro de publication : WO0190951 (brevet US)
Date de publication : 29.11.2001
Déposant(s) : THE BOARD OF TRUSTEE OF THE LELAND STANFORD JUNIOR UNIVERSITY
Inventeur(s) : HERZENBERG, Léonard, A., MOORE, Wayne, PARKS, David, HERZENBERG, Leonore, OI, Vernon
L'invention se rapporte à des bases de données et à l'échange d'informations scientifiques. Elle se rapporte plus particulièrement à une base de données unifiée qui permet à des chercheurs de partager facilement leurs données avec d'autres chercheurs. Le procédé de l'invention facilite également la collecte, l'annotation, le stockage, la gestion, l'extraction et l'analyse de données scientifiques par le biais et à l'intérieur de la base de données. Il permet l'archivage et l'extraction directs des données recueillies depuis des appareils de laboratoire, assurant ainsi la cohérence des données à des fins de demande de brevet ou autres. Il facilite en outre le partage de données entre des laboratoires situés dans des lieux éloignés. Le procédé de l'invention autorise enfin la création automatisée de protocoles expérimentaux.
www.inpi.fr

Computerized researched system and methods for processing and displaying scientific, technical, academic, and professional information

Patent Number: WO0057306
Publication date: 2000-09-28
Inventor(s): GOTTSMAN EDWARD J;; SANN ALEXANDER (US)
Applicant(s): SANN ALEXANDER (US)
Equivalents: AU3747200, CA2367046, EP1224572 (WO0057306)
Cited Documents: US5794236; US5157783
The present invention is a research tool consisting of a computerized system and method for processing and displaying information. The system can be applied to the content of any scientific, technical, academic, or professional publishing sub-discipline in which each content item can be classified under a collection of principles ("classification categories") of the discipline, for example: law (6), immigration law (29), science, polymer chemistry, medicine, and economics (7). The present invention employs as appropriate for the sub-discipline, the traditional content and system tools of computerized research systems: file-building software, file-processing software (30), including full-text searching and hypertext links (11), a user interface, and content types such as tables of contents, index terms, abstracts, journal articles (7), parts and subparts of books, research notes, and reports, drawings, cases (6), statutes, and the like. The content of the computerized system records the knowledge and research of the sub-discipline. Each classification category is an expression of an authoritative definition, principle, or relevant fact in the sub-discipline.
http://ep.espacenet.com

Electronic peer review and publication of scholarly writings

Patent Number: WO0065463
Publication date: 2000-11-02
Inventor(s): WRIGHT TIMOTHY (US); HOTCHKISS ROBERT N (US)
Applicant(s): CYBERMEDICA INC (US); WRIGHT TIMOTHY (US); HOTCHKISS ROBERT (US)
A peer review system for scholarly texts is provided. The system includes a computer (12), a database of reviewers (40), and a program for retrieving a list of reviewers corresponding to the content of the text. The

reviewer database (40) preferably includes information concerning an expertise of each reviewer. In another aspect, the invention provides a research retrieval system comprising a database of peer-reviewed articles indexed for retrieval with category information. The peer-reviewed articles may be published together with updates and letters, both of which may also be peer-reviewed. In another aspect, the invention provides a system for organizing a conference for presentation of scholarly research.
http://ep.espacenet.com

Database model, tools and methods for organizing information across external information objects

Patent Number: US2002178185
Publication date: 2002-11-28
Inventor(s): CHEN YIDONG (US); MOH DAVID (US); BITTNER MICHAEL (US); KUCHINSKY ALLAN (US); MELTZER PAUL (US); CREECH MICHAEL L (US); GRAHAM KATHERINE D (US)
An interactive software system provides a framework, methodology, and tools for organizing information during speculative phases of research using a narrative structure. The system provides interactive tools and techniques for organizing, sharing, and using diverse information at multiple levels of abstraction through coordinated multiple-view visualization in the process of hypothesis formation. Annotation and collaboration are supported.
http://ep.espacenet.com

Method and apparatus for processing a display document utilizing a system level document framework

Patent Number: US5537526
Publication date: 1996-07-16
Inventor(s): ANDERSON DAVID R (US); PALEVICH JACK H (US); SCHAEFFER ARNOLD (US); ROSENSTEIN LARRY S (US); WATANABE RYOJI (US)
Applicant(s): TAUGENT INC (US)
An object-oriented compound document architecture provides system level support for document processing features. The object-oriented compound document framework supports a variety of document processing functions. The framework provides system level support of collaboration, linking, eternal undo, and content based retrieval, among other things. System level support is provided for document changes, annotation through model and linking, anchors, model hierarchies, enhanced copy and pasting, command objects, and a generic retrieval framework.
http://ep.espacenet.com

Internet-linked system for directory protocol based data storage, retrieval and analysis

Patent Number: US2002049782
Publication date: 2002-04-25
Inventor(s): MOORE WAYNE A (US); OI VERNON T (US); HERZENBERG LEONARD A (US); HERZENBERG LEONORE A (US); PARKS DAVID RHODES (US)
Applicant(s):
The present invention is related to databases and the exchange of scientific information. Specifically the invention disclosed a unified scientific database that allows researchers to easily share their data with other researches. The present invention also allows for the ease of data collection, annotation, storage, management, retrieval and analysis of scientific data through and into the database. In addition, it allows for archival storage and retrieval of data collected directly from laboratory instruments to ensure data consistency for patent and other purposes. It also allows for ease of sharing data between laboratories in remote locations. The present invention also supports the automated creation of experimental protocols
http://ep.espacenet.com

Réseaux de description / système de classification des données

Mots clés : graph model – semantic relation – various view point – facet – knowledge description – network model – entity relation-ship – ontological/hermeneutical database – inter-object relationships – data polyarchy – multi-navigation path browsing system – multiple inheritance taxonomy – lattice data structure – enhanced tree control system

Modèles de graphes:

Information retrieval device, information retrieval method and recording medium having information retrieval processing program recorded thereon

Publication number : 2001-209647
Date of publication of application : 03.08.2001
Applicant : ATR NINGEN JOHO TSUSHIN KENKYUSHO:KK
Inventor : FUJIWARA YUZURUSHIMOHARA KATSUNORIMAESHIRO TETSUYA
PROBLEM TO BE SOLVED: To provide an information retrieval device, an information retrieval method and a recording medium capable of retrieving the various kinds of information from various view points and easily performing integration between data bases.
SOLUTION: The respective plural pieces of the information expressed by a homogenized 2-part graph model are made to correspond to plural rules for describing semantic relation with the other information relating to those piece of the information and recorded in a data base part 3. The relating other information is retrieved based on the rules made to correspond to the information retrieved from the data base part 3 by a retrieval inference part 2 and the respective pieces of the retrieved information are outputted by an output part 4.
www.jpo.go.jp

Factorisation conceptuelle et unification de graphes représentant des modèles sémantiques

Numéro de publication : WO0163382 (brevet US)
Date de publication : 30.08.2001
Déposant(s) : SYNQUIRY TECHNOLOGIES, LTD.
Inventeur(s) : ALLEMANG, Dean, T., SIMOS, Mark, A.
La présente invention concerne des techniques permettant de factoriser un ou plusieurs graphes en un graphe composite contenant des nœuds représentant des éléments analogues de graphes source et un graphe de variabilité contenant des nœuds représentant des différences dans les graphes source. On réalise le graphe composite en prenant des arbres à entrées analogues dans les graphes source et en traversant ces arbres de haut en bas tout en recherchant les nœuds dans chaque arbre à chaque niveau analogue aux nœuds de ce niveau des autres arbres à entrées. On trouve les ensembles de nœuds analogues en corrélant d'abord automatiquement les nœuds du niveau en cours d'examen. Cette corrélation peut, par exemple, être fondée sur des valeurs similaires d'une propriété des nœuds corrélés. Puis on affiche à un utilisateur des représentations des ensembles de nœuds corrélés, lesquelles indiquent quels ensembles de nœuds corrélés sont en fait analogues. L'utilisateur peut aussi indiquer que les nœuds dans un ensemble de nœuds corrélés ne sont pas analogues ou que la corrélation automatique a découvert qu'ils n'étaient en fait pas autonomes. Les nœuds analogues sont affectés à un nœud correspondant à un niveau correspondant du graphe composite. Les autres nœuds sont affectés à un ensemble de nœuds anomales. Une application de ces techniques consiste à gérer des graphes qui sont des modèles de catalogues d'articles.
www.inpi.fr

Relations inter-objets :

Information catalog system with object-dependent functionality

Patent Number: US5717925
Publication date: 1998-02-10
Inventor(s): HARPER LLOYD (US); LABRIE JACQUES (US)
Applicant(s): IBM (US)
A computer implemented information catalog database system is disclosed for cataloging information stored in one or more data storage resources under the control of one or more data processing nodes. The catalog system includes a cataloging service facility for performing one or more information cataloging functions to organize and present a graphical view of the information stored in the data storage resource. The information cataloging functions are categorized into a plurality of defined function categories. An object generation facility generates one or more meta-data objects corresponding to units of information stored in the data storage resource. The meta-data objects contain attributes defining characteristics of the information units to which they correspond and the meta-data objects are assigned to one or more of the function categories to define the information cataloging functions which may be performed on the meta-data objects. A user interface is provided for executing the information cataloging functions on the meta-data objects in response to user input
http://ep.espacenet.com

Génération dynamique de plusieurs hiérarchies des relations inter-objets basées sur les valeurs des attributs de ces objets

Numéro de publication : EP1211613 (brevet US)
Date de publication : 05.06.2002
N° de priorité : US250344 P
Déposant(s) : MICROSOFT CORPORATION
Inventeur(s) : Cameron, Kim, Robertson, George, G., Brown, Mark, R.
Les appareils et les procédures décrits engendrent dynamiquement une polyarchie de données à partir d'informations reçues d'une mémoire de données (par exemple un répertoire ou une base de données). La polyarchie des données représente de multiples hiérarchies ou relations entre des objets en fonction d'attributs des objets. Ces multiples hiérarchies sont engendrées et représentées d'une manière qui est indépendante de la désignation de l'objet et de structures de données hiérarchiques prédéterminées.
www.inpi.fr www.jpo.go.jp

Information storage method of integrated ER model and software development process management system

Publication number : 09-006602
Date of publication of application : 10.01.1997
Applicant : FUJITSU LTD
Inventor : RYU TADAMITSUTOSHIMA TETSUOIZUMI HIROYUKIMURAKAWA MASAHIKONAKAMURA KATSUICHI
To more correctly express the actual world in a proper form by describing the sequence relation and the causal relationship between entities in an integrated entity-relationship model, to which an extended entiry relation model is extended, to model the actual world which cannot be modeled in the conventional extended entity-relationship model and is dynamically changed. CONSTITUTION: A software development process management system 10 includes a display device 11, an input device 12 like a keyboard, an analysis part 13, a syntax class storage part 14, a stored data input/output part 15, a specification storage part 16, and an implemented code storage part 17. In this system 10, a user describes a program as a procedure sequence and inputs the program to the input device 12 to store an ER model corresponding to the program in the

specification storage part 16. Further, the user describes specifications and inputs them to the input device to store an ER model corresponding to these specifications in the specification storage part 16.
www.jpo.go.jp

Data description method for network model

Publication number : 2001-154904
Date of publication of application : 08.06.2001
Applicant : HITACHI LTD
Inventor : IWAHARA KOTAROOTA YOSHIMI
PROBLEM TO BE SOLVED: To provide an easy-to-understand high-grade data description method capable of easily operating data and judging the propriety and consistency of the data for substituting the expression method of a chart form relating to a network model.
SOLUTION: In this data description method, the data relating to all objects are made into blocks and the relation of the object and the other object is related by association and included inside the respective blocks. The objects are classified into instance (proper noun, characteristic value) objects and class (common noun) objects and class object association is described in a definition part (classification part) called a class library. Thus, the data of the network model are easily understandably expressed so as to easily operate the data and the judgment of the propriety/consistency of the data is made possible.
www.jpo.go.jp

Processing method for instance base

Publication number : 09-016401
Date of publication of application : 17.01.1997
Applicant : HITACHI INF SYST LTD
Inventor : ISHIZUKA IKUTO
PURPOSE: To facilitate input operation by inputting retrieval conditions to be registered in the instance base by selecting a path of a hierarchical network.
CONSTITUTION: A user who uses an instance base retrieval system specifies one path of the word and phrase hierarchical network held previously in a word and phrase hierarchical network storage means 10a through the hierarchical menu selecting process of a network path specifying means 11. When the path is specified, a network path converting means 12 refers to node properties indicating which of properties and property values respective nodes on the path are and converts them into pairs of properties and property values. The pairs of properties and property values which are thus obtained are used as retrieval conditions for collation with instances stored and registered in the instance base 10b and stored by an instance storage means 14 in the instance base 10b as part of descriptions representing problem instances in concrete.
www.jpo.go.jp

Description of structure in frame model and model understanding system

Publication number : 62-237577
Date of publication of application : 17.10.1987
Applicant : CASIO COMPUT CO LTD
Inventor : NAKAMA MASATO
PURPOSE: To reduce the number of frames for the knowledge expression of an object model by expressing network relation as well by frames and embedding the frames in a hierarchical structure. CONSTITUTION: Noticing that the network relation is formed also on a slot of the upper hierarchy of 'part-of' relation as well, the network is expressed by a clause and expressed as the structure slot on the upper hierarchy of the 'part-of' relation. An object is expressed by embedding the slot relating to the 'part-of' relation and a slot relating to the clause function in the hierarchy. Thereby, the upper hierarchical frame of the 'part-of' relation can be automatically formed by matching the clause with the network relation in the understanding part by using a pattern matching function due to the existing prologue language or the like.
www.jpo.go.jp

Method and device for controlling data transition, and processing program of the same

Publication number : 2003-006010
Date of publication of application : 10.01.2003
Applicant : HITACHI LTDHITACHI SOFTWARE ENG CO LTD
Inventor : MATSUSHIMA MICHITOSHITOYAMA YUJI
Abstract:PROBLEM TO BE SOLVED: To provide a data transition controller to transit data having a network structure data base to data having a relational data base.
SOLUTION: The data transition controller 100 is provided with a data type transition processing part 102 to transit data base definition 112 of data on the basis of the network structure data base system 110 (DB hereafter) to table definition 122 of a relational data base system 120 (RCB hereafter) and a record transition processing part 104 to transit a mater record A114-1 and a slave record B114-2 in parent-child relationship with the master record of the network hierarchy DB 114 to the same line of the table of an RDB 124.

Relations sémantiques :

Procédé pour représenter et comparer du contenu multimédia dépendant d'un classement

Numéro de publication : EP1132832
Date de publication : 12.09.2001
N° de priorité : US518937
Déposant(s) : MITSUBISHI DENKI KABUSHIKI KAISHA
Inventeur(s) : Divakaran, Ajay, Vetro, Anthony, Sun, Huifang
L'invention concerne un procédé pour produire une représentation d'un contenu multimédia en segmentant d'abord le contenu multimédia dans l'espace et en extrayant des objets de façon temporelle. Le dispositif d'extraction est appliqué aux objets pour produire des attributs sémantiques et syntactiques, des relations, et un ensemble de confinements d'entités contenues. Les entités contenues sont codées pour produire des graphiques acycliques dirigés des entités contenues, où chaque graphique acyclique dirigé représente une interprétation particulière du contenu multimédia. Des attributs de chaque entité contenues sont mesurés et les attributs mesurés sont assignés à chaque entité contenue correspondante dans les graphiques acycliques dirigés pour classer le contenu multimédia.
www.inpi.fr

Structure permettant de créer, de mettre à jour, d'interroger et de visualiser une navigation d'objets de données ainsi que de procéder à des annotations textuelles de relations existant entre des objets de données

Numéro de publication : WO0177904
Date de publication : 18.10.2001
N° de priorité : US60/196,533
Déposant(s) : REVELINK, INC.
Inventeur(s) : WHITE, Jason, S., HALL, Rebecca, L., ENGSTROM, Harold, H.
Cette invention a trait à une structure permettant de créer, de mettre à jour, d'interroger et de visualiser une navigation d'objets de données ainsi que de procéder à des annotations textuelles de relations existant entre des objets de données (703). La structure stocke une information caractérisant une sémantique de relations existant entre plusieurs objets au nombre desquels, des données objet (607), correspondant à chaque objet donné appartenant à cette pluralité d'objets, représentant des attributs de l'objet donné. Des données bidirectionnelles de modificateur (609) sont stockées qui correspondent à au moins un premier objet ainsi qu'à au moins un second objet, représentant un premier texte caractérisant la sémantique d'une relation existant entre au moins un premier et au moins un second objet et représentant un second texte caractérisant la sémantique d'une relation existant entre au moins le second objet et le premier objet précités.
www.inpi.fr

Computer database systems with object data models and associated classification rules, based on ontological concepts, that allow quicker and more efficient location of searched for data

Patent Number: DE10123959
Publication date: 2002-11-28
Inventor(s): MAEDCHE ALEXANDER (DE); ANGELE JUERGEN (DE)
Applicant(s): ONTOPRISE GMBH (DE)
Computer system comprising means for storing data, means for allocating stored data to classes of at least one class structure forming an object model, means for storing rules for associating elements of class structures, an inference unit (5) for generating output variables by evaluating rules and an editor for generating rules, class structures or elements of class structures.
http://ep.espacenet.com

Method and apparatus for information delivery with archive containing metadata in predetermined language and semantics (issued patent)

United States Patent Application 20030088573
Kind Code A1
Stickler, Patrick May 8, 2003
Correspondence Name and Address: ANTONELLI TERRY STOUT AND KRAUS
Assignee Name and Adress: ASAHI KOGAKU KOGYO KABUSHIKI KAISHA
The present invention is related to an information delivery system that includes a storage device and a set of physical data objects holding content. The data objects are mapped by metadata held in an archive. The archive utilizes a predetermined language and semantics that may also be used in forming an external query for resolution by the archive. Such queries may be generated by software process such as agents under human or software control.
www.uspto.gov

Search system and method based on multiple ontologies (issued patent)

United States Patent 6,424,973
Baclawski July 23, 2002
Inventors: Baclawski; Kenneth P. (Waltham, MA)
Assignee: Jarg Corporation (Waltham, MA)
A distributed computer database system includes one or more front end computers and one or more computer nodes interconnected by a network into a search engine for retrieval of objects processed by a variety of interrelated ontologies. Each object conforms to a specific ontology. A query is an object which conforms to a specific ontology, which is to be used for retrieval of objects conforming to one or more target ontologies. A query from a user is transmitted to one of the front end computers which forwards the query to one of the computer nodes, termed the home node, of the search engine. The home node extracts features from the query, according to its ontology. These features are then hashed. Each hashed feature and the list of target ontologies is transmitted to one node on the network. Each node on the network which receives a hashed feature uses the hashed feature of the query to perform a search on its respective partition of the database. The results of the searches of the local databases are composed of the object identifiers of objects that match the query and the ontologies within which they were processed, as well as equivalent hashed features within other ontologies. These other hashed features are forwarded, as needed, to their respective nodes, and this process continues until the desired target ontologies are reached. When the target ontologies are reached, the results of the searches of the local databases are gathered by the home node. The results of the query are then computing for each target ontology. This process may be repeated by the home node to refine the results of the query.
www.uspto.gov

Method and apparatus for active information discovery and retrieval (issued patent)

United States Patent 6,498,795
Zhang , et al. December 24, 2002
Inventors: Zhang; Junbiao (Somerset, NJ); Ott; Maximilian (Pennington, NJ)
Assignee: NEC USA Inc. (Princeton, NJ)
The present invention is built upon an active network framework and an ontology-based information hierarchy, and, in addition to the features found in current network models, it provides a symmetrical framework for information filtering and binding in the network. Queries from information requesters are directly routed to relevant information sources and contents from information providers are distributed to the destinations that expressed an interest in the information. The query packets and content packets can carry commands that are executed at the active network nodes encountered by the packets as they traverse the network.
www.uspto.gov

Conceptual factoring and unification of graphs representing semantic models (patent application)

United States Patent Application 20030050915
Kind Code A1
Allemang, Dean T. ; et al. March 13, 2003
Inventors: Allemang, Dean T.; (Boston, MA) ; Simos, Mark A.; (Watertown, MA)
Correspondence Name and Address: GORDON E NELSON PATENT ATTORNEY, PC
Techniques for factoring one or more source graphs into a composite graph containing nodes representing analogous elements of the source graphs and a variability graph containing nodes representing differences in the source graphs. The composite graph is made by taking analogous input trees from the source graphs and traversing the trees from top to bottom looking for nodes in each tree at each level that are analogous to the nodes at that level in the other input trees. The sets of analogous nodes are found by first automatically correlating the nodes in the level currently being examined. Correlation may, for example, be based on similar values of a property of the nodes being correlated. Representations of the sets of correlated nodes are then displayed to a user, who indicates which sets of correlated nodes are in fact analogous. The user may also indicate that the nodes in a set of correlated nodes are not analogous or that nodes that were found by the automatic correlation not to be autonomous are in fact. The analogous nodes are allocated to a corresponding node at a corresponding level in the composite graph; the other nodes are allocated to a set of anomalous nodes. One application for the techniques is managing graphs which are models of catalogs of items.
www.uspto.gov

Systems, methods and computer program products for integrating databases to create an ontology network (patent application)

United States Patent Application 20030018616
Kind Code A1
Wilbanks, John Thompson ; et al. January 23, 2003
Inventors: Wilbanks, John Thompson; (Chapel Hill, NC) ; Levy, Joshua Lerner; (Chapel Hill, NC) ; Segaran, Suresh Toby; (Chapel Hill, NC) ; Gardner, Richard N.; (Raleigh, NC)
Correspondence Name and Address: MYERS BIGEL SIBLEY & SAJOVEC
Databases are integrated by obtaining an entity-relationship model for each of the databases, and identifying related entities in the entity-relationship models of at least two of the databases. At least two of the related entities that are identified are linked, to thereby create an entity-relationship model that integrates the plurality of databases. The entity-relationship model that integrates the databases provides an ontology network that integrates the diverse ontologies that are represented by the independent databases. By navigating the entity-relationship model in response to queries, discovery may be obtained that may not be obtainable from any one of the independent databases.
www.uspto.gov

Systems, methods and computer program products for integrating biological/chemical databases using aliases (patent application)

United States Patent Application 20020194154
Kind Code A1
Levy, Joshua Lerner ; et al. December 19, 2002
Inventors: Levy, Joshua Lerner; (Chapel Hill, NC) ; Segaran, Suresh Toby; (Chapel Hill, NC) ; Wilbanks, John Thompson; (Chapel Hill, NC) ; Gardner, Richard N.; (Raleigh, NC)
Correspondence Name and Address: MYERS BIGEL SIBLEY & SAJOVEC
Aliases are used to integrate biological/chemical databases, each of which includes records for a plurality of biological/chemical objects. A set of records is identified in the biological/chemical databases that relates to a single biological/chemical object. An entity is established in a data structure that corresponds to the single biological/chemical object. The entity includes aliases, a respective one of which refers to a respective record in the set of records in the biological/chemical databases. The entities are linked in an entity-relationship model. The entities that are linked in an entity-relationship model are traversed in response to a query, to thereby obtain query results that are based on the records in the biological/chemical databases. Thus, disparate databases can be integrated into a single entity-relationship data structure. By navigating the single

entity-relationship data structure in response to queries, discovery may be obtained that may not be obtainable from any one of the disparate databases.
www.uspto.gov

Method for representing and comparing multimedia content (issued patent)

United States Patent 6,546,135
Lin , et al. April 8, 2003
Inventors: Lin; I-Jong (Lawrenceville, NJ); Vetro; Anthony (Staten Island, NY); Divakaran; Ajay (Scotch Plains, NJ); Kung; Sun-Yuan (Princeton, NJ)
Assignee: Mitsubishi Electric Research Laboratories, INC (Cambridge, MA)
A method for generating a representation of multimedia content by first segmenting the multimedia content spatially and temporally to extract objects. Feature extraction is applied to the objects to produce semantic and syntactic attributes, relations, and a containment set of content entities. The content entities are coded to produce directed acyclic graphs of the content entities, where each directed acyclic graph represents a particular interpretation of the multimedia content.
www.uspto.gov

Automatic creating device of semantic network and computer readable recording

Publication number : 2001-243223
Date of publication of application : 07.09.2001
Applicant : NEC CORP
Inventor : RI KOYAMANISHI KENJI
PROBLEM TO BE SOLVED: To automatically generate a semantic network in which recollection relation between words is expressed by a directed graph based on large amount of text data.
SOLUTION: A statistic part 2 performs morpheme analysis by inputting plural texts and takes statistics of co-occurrence frequency between words, appearance frequency of words and the number of all texts. Next, a calculating part 3 inputs the co-occurrence frequency between words, etc., from the statistic part 2 and calculates intensity of recollection from an optical word to other optional word by using an information amount yardstick. In this case, the intensity of recollection from a word A to an other word B is calculated in consideration of statistic amount regarding appearance, non-appearance of the word B in a group of texts where the word A appears and statistic amount regarding appearance, non-appearance of the word B in a group of text where the word A does not appear. Nest, generating part 4 inputs the intensity of recollection between words from the calculating part 3, generates the semantic network by putting a directed link from word to word with inputted intensity of recall equal to or more than a predetermined threshold and outputs it to a storage part 1.
www.jpo.go.jp

Variété de points de vue / facettes :

Méthode et appareil d'affichage d'une classification des brevets

Numéro de publication : EP1213665
Date de publication : 12.06.2002
N° de priorité : JP2000372401
Déposant(s) : Patentmall Limited, Derwent Information Limited
Inventeur(s) : Ohga, Akihiro
Un procédé d'affichage de la classification d'un document de brevet est fourni, auquel sont ajoutées des classifications de brevet multi-point de vue. Le procédé rend possible la saisie du document de brevet à partir d'une variété de points de vue supérieure à ceux obtenus à partir de "l'abrégé" du document de brevet, sans lire la description, et améliore par conséquent l'efficacité de la recherche de brevet. Le procédé comprend les étapes suivantes: (a) récupérer des classifications de brevet multi-point de vue ajoutées au document de brevet; (b) utiliser une base de données mémorisant une table de classification de brevet multi-point de vue pour sortir de la mémoire des classifications de brevet multi-point de vue plus élevées dans la hiérarchie que chacune des classifications de brevet multi-point de vue récupérées; et (c) afficher, avec leurs titres, au moins soit les classifications de brevet multi-point de vue récupérées, soit les plus hauts niveaux de hiérarchie. Chacune des classifications de brevet multi-point de vue comprend des codes thématiques, des points de vue et des points de vue sous-divisés, de manière à ce que les codes thématiques et/ou les points de vue des classifications de brevet multi-point de vue ajoutées au document de brevet puissent être listées et sorties dans l'ordre décroissant de fréquence de leur occurrence.
www.inpi.fr

Method and apparatus for automatic construction of faceted terminological feedback for document retrieval (issued patent)

United States Patent 6,519,586
Anick , et al. February 11, 2003
Inventors: Anick; Peter (Marlboro, MA); Tipirneni; Suresh (Waltham, MA)
Assignee: Compaq Computer Corporation (Maynard, MA)
Iterative information retrieval from a large database of textual or text-containing documents is facilitated by automatic construction of faceted representations. Facets are chosen heuristically based on lexical dispersion, a measure of the number of different words with which a particular search expression co-occurs within a given type of lexical construct (e.g., a noun phrase) appearing in the document set. Words having high dispersion rates represent "facets" that may be used to organize the documents conceptually in accordance with the search expression, effectively providing a concise, structured summary of the contents of a result set as well as presenting a set of candidate terms for query reformulation.
www.uspto.gov

Information representing device and computer-readable recording medium recording information presentation program

Publication number : 11-194864
Date of publication of application : 21.07.1999
Applicant : NEC CORP
Inventor : HARA MASAKIKUNIEDA KAZUO

PROBLEM TO BE SOLVED: To make performable an equivocal data display with an operation that is smooth and also intuitive by surrounding a data object with a polyhedral object, defining a data coordinate system in the space and equivocally visualizing and displaying the data object based on the coordinate system. SOLUTION: A data display space defining means 31 produces a polyhedral object which associates an optional data visualizing rule with respective configuration planes of the polyhedral object. A data display space storage base 32 stores information such as the shape of a defined polyhedral object and data visualizing rules that are associated with each plane of configuration planes of the polyhedral object. A facet selecting means 33 selects more than one plane of the polyhedral object according to an instruction from a system or a user. A data coordinate system calculating means 34 decides a data coordinate system in data display space of the polyhedral object based on the data visualizing rules that are associated with a selected plane. www.jpo.go.jp

Data display method

Publication number : 2002-230038
Date of publication of application : 16.08.2002
Applicant : HITACHI LTD
Inventor : OKOCHI KAZUYAMORITA TOYOHISAITO YUKIYASU
PROBLEM TO BE SOLVED: To solve the problem that since it is necessary to classify a data group by a classification method from one classification standard in a conventional tree structure, any point of view other than a certain classification standard is scarified when a plurality of classification standards are present in data, and that it is impossible to classify the data group based on the plurality of classification standards, and to compare the data for each classification.
SOLUTION: This method is provided with a means for managing a table for holding the information of a plurality of tree structures and leaf information for holding the information of a plurality of master nodes to which a leaf is belonging, and for classifying and managing the group of the same leaf by using the plurality of tree structures. Also, this method is provided with a means for quickly referring to the same data stored in the plurality of tree structures and the relevant data.

Structure de données en treillis / réseaux de données / relations d'interdépendance:

Enhanced tree control system for navigating lattices data structures and displaying configurable lattice-node labels (issued patent)

(Brevet déjà en votre possession)
No. Publication (Sec.) : US6055515
Date de publication : 2000-04-25
Inventeur : CONSENTINO SHARON RENEE (US); GREEF ARTHUR REGINALD (US); FOHN STEFFEN MICHAEL (US); HANSEN GREGORY CHRISTOPHER (US)
Déposant : IBM (US)
The objective of the instant invention is to define a computer user interface display system that presents hierarchical data in an enhanced tree presentation control that blends the ease-of-use character of the familiar "tree presentation control" with a technique for navigating more complex lattice data structures, while at the same time providing more node information by displaying configured lattice-node labels along with the node's name. Thus a primary objective of this invention is to facilitate building, maintaining and using a multiple inheritance taxonomy such as a product catalog data base by means of a multi-navigation path browsing system, which is made possible through the capability of this system's multiple inheritance capability; with indicators in the tree view to indicate ancestors such as immediate parents and further removed ancestors.
http://ep.espacenet.com www.uspto.gov

System for browsing a network resource book with tabs attached to pages (issued patent)

No. Publication (Sec.) : US5500929
Date de publication : 1996-03-19
Inventeur : DICKINSON ROBERT D (US)
Déposant : TALIGENT INC (US)
Browsing through a diverse set of resources residing on a network using a name service protocol is accomplished with an object oriented operating system. A window is displayed with several resource books. A resource book is selected by the user and the computer resources associated with the selected book are displayed in another window. Attached to the page of the book, tabs indicate the type of resources and are used to navigate through the book. Upon selection of a specific resource, the user may direct the resource to implement a task within a directed fashion. Furthermore, the system allows the user to form personal directories to facilitate the selection of frequently utilized resources.
http://ep.espacenet.com www.uspto.gov

Hybrid database structure linking navigational fields having a hierarchical database structure to informational fields having a relational database structure (issued patent)

No. Publication (Sec.) : US5295261
Date de publication : 1994-03-15
Inventeur : SIMONETTI CHARLES T (US)
Déposant : PACIFIC BELL CORP (US)
Improved database structure is described in which the fields of each database record are divided into two classes, navigational and informational data. The data in the navigational fields is stored in a topological map which may be viewed as a tree structure or the merger of two or more such tree

structures. The informational data is preferably stored in a conventional relational database. Each leaf node in the topological map specifies a unique record in the relational database.
http://ep.espacenet.com www.uspto.gov

Information catalog system with object-dependent functionality

No. Publication (Sec.) : EP0647909
Date de publication : 1995-04-12
Inventeur : HARPER LLOYD (US); LABRIE JACQUES (US)
Déposant : IBM (US)
An information catalog database system (2) is disclosed for cataloging information stored in one or more data storage resources (12-24) under the control of one or more data processing nodes (4). The catalog system (2) includes a cataloging service facility (60)_for performing one or more information cataloging functions to organize and present a graphical view of the information stored in the data storage resource (12-24). The information cataloging functions are categorized into a plurality of defined function categories. An object generation facility generates one or more meta-data objects corresponding to units of information stored in the data storage resource (12-24). The meta-data objects contain attributes defining characteristics of the information units to which they correspond and the meta-data objects are assigned to one or more of the function categories to define the information cataloging functions which may be performed on the meta-data objects. A user interface is provided for executing the information cataloging functions on the meta-data objects in response to user input.
http://ep.espacenet.com www.uspto.gov

A method for data retrieval using tree-structured query withreturned result set in XML format

No. Publication (Sec.) : CA2312597
Date de publication : 2002-01-05
Inventeur : ZHANG BENJAMIN (CA)
Déposant : ZHANG BENJAMIN (CA)
The present invention provides a technique by which complex queries can be defined and executed in a very flexible and efficient manner. It allows user to define the relationships between a parent and its different children, which can be nested to n-depth levels. The relationships are mapped to a special tree structure and the query processor executes the query based on t he tree in an efficient way. The output data is also constructed in the defined tree structure in XM L by default, which eliminates data redundancy. The output can be formatted either in Extensible Markup Language (XML) or HyperText Markup Language (HTML) format. The present invention also provides two mechanisms to allow user to define t he query: either through configuration files or through a graphical user interface. It is designed in such a way that it can be easily implemented as stand-alone application, for batch processing, or interacting with other applications. The query processing module and the graphical user interface modules are written in the Java programming language and the Java Database Connectivity (JDBC) technologies. The technique of data retrieval disclosed in this invention is different fro m existing techniques in its high degree of flexibility and complexity in terms of the query structure, y et efficient processing and accurate output result. Because the output is also in tree structure, it eliminates data redundancy and more readable. Furthermore, it is designed as generic as possible and can be used for any data retrieval as long as a tree structure can be defined among the tables or nodes. It can be used in a wide range of systems for database publishing, content management, supply chain management (CRM), electronic data interchange (EDI), and other e-business applications and middleware.
http://ep.espacenet.com

Method and apparatus based on relational database design techniques supporting modeling, analysis and automatic hypertext generation for structured document collections

No. Publication (Sec.) : US6212530
Date de publication : 2001-04-03
Inventeur : KADLEC JAROSLAV (DE)
Déposant : COMPAQ COMPUTER CORP (US)
A computer method and apparatus for generating and maintaining a structured collection of documents describing a desired system is provided. A conceptual model of the desired system includes entities and relationships among the entities. An entity-relationship diagram is representative of the desired system. Documents are categorized and subsequently maintained with respect to the entities in the entity-relationship diagram. A hierarchy of process-message matrices is employed to determine the communications or dynamic exchanges of message entities in the modeled system and reflected in the entity-relationship diagram. A relational database implements the model and holds document contents (i.e., actual information) needed to automatically generate the collection of documents in a complete formatted manner for printing and/or compiling through word processing and/or compilation and linking means. The database further enables automatic hypertext generation by mapping interdependencies (relationships) between the entities into interdependencies (links) between the documents. One application of the invention automatically generates and maintains a collection of hypertext documents describing a business system.
http://ep.espacenet.com

Method for dynamically maintaining multiple structural interpretations in graphics system.

Patent Number: EP0637812
Publication date: 1995-02-08
Inventor(s): SAUND ERIC (US); BECKER CRAIG DAVID (US); MORAN THOMAS PATRICK (US)
Applicant(s): XEROX CORP (US)
An object oriented graphic input and display system for graphical abstract objects, responsive to user selected manipulation functions, having a data structure (70; Fig. 3A) including input means, display means and function selection means, the input means being user manipulable for entering graphical objects onto the display and for selecting functions on the function selection means for manipulating the graphical objects, a lattice data structure (100) responsive to data signals from the data structure representing objects entered on the display for decomposing the abstract objects into elemental objects, means (108,110) for organizing elemental objects into groups of elemental objects, and means for re-organizing the groups of elemental objects into a further group of elemental objects, the graphical data structure and function selection means coordinating the reorganization in accordance with user selection of functions to be performed on all or on portions of the objects.
http://ep.espacenet.com

Poly vectoral reverse navigation (issued patent)

United States Patent 6,505,209
Gould , et al. January 7, 2003
Inventors: Gould; Eric Justin (Austin, TX); Buckmaster; Janna (Austin, TX); Wilkens; Todd (San Francisco, CA); Trisnadi; Paulus W. (Austin, TX)
Assignee: MONKEYmedia, Inc. (Austin, TX)
This invention includes a method of navigating a collection of nodes by selecting a first node, generating a context list and displaying first node and context list. Each context of the context collection includes a

second node essentially referencing the first node. Another aspect of the invention includes a method of generating an address from a collection of contexts containing steps of receiving a selected attribute collection and generating the address. Each context includes a resolution address and an attribute collection. Each of the attribute collections contains at least one attribute. Whenever the attribute collection of a first context of the context collection is essentially the same as the selected attribute collection, the resolution address of the first context is selected as the generated address. Another aspect of the invention includes a method of navigating a hypergraph. The hypergraph includes at least one context list. Each context list contains at least one context. Each context includes a node. The method includes steps of selecting a first context list of the context lists, selecting a first context of the first context list, and displaying the node of the first context of the first context list. Aspects of this invention include computer programs implemented on computer readable media, situated both local to a user and in client-server configurations.
www.uspto.gov

Method and system for a federated digital library by managing links (issued patent)

United States Patent 6,044,378
Gladney March 28, 2000
Inventors: Gladney; Henry Martin (Saratoga, CA)
Assignee: International Business Machines Corporation (Armonk, NY)
A system and method are provided for determining a relationship between first and second data elements by using a relationship element. The first and second data elements are each protected elements being bound to first and second indices for providing referential integrity. The relationship is determined by reading the relationship element in response to a request and the second element is identified based on information read from the relationship element. The relationship element is in a different data collection than at least one of the first and second elements. This structure provides a robust and flexible means to create and maintain relationships between existing documents stored in various electronic libraries, while minimizing changes to exiting system software and requiring no change to application software. The invention also is directed to relating a data element in a protected resource with meta-data in a relationship resource, where the protected resource and relationship resource are arranged in a distributed manner.
www.uspto.gov

Retrieval of information from lattice-structured content-addressable memories by concurrently searching in opposing directions (issued patent)

United States Patent 5,428,773
Berkovich June 27, 1995
Inventors: Berkovich; Semyon (Rockville, MD)
Assignee: AlliedSignal Inc. (Morris Township, Morris County, NJ)
An information processing unit having a memory (16) storing a set of data elements in a data lattice structure. The memory is content-addressably searched by a pair of processors (12) and (14) controlling confronting traversals of the data lattice structure. A traversal controller (24) generates a search routine for the two processors (12) and (14) resulting in a natural two-way concurrency in their operation. A second memory (22) stores processing instructions and pointers used by the traversal controller (24) to generate the search routine. The processing instructions and pointers are extracted from the second memory under the control of processors (18) and (20). An interface processor (26) is connected to a communication link (28) connecting the information processing unit to utilization devices.
www.uspto.gov

Immersive movement-based interaction with large complex information structures (issued patent)

United States Patent 6,154,213
Rennison , et al. November 28, 2000

Inventors: Rennison; Earl F. (1076 De Haro St., San Francisco, CA 94107); Strausfeld; Lisa S. (2355 Polk St., San Francisco, CA 94109); Horowitz; Damon M. (130 Frederick St., #106, San Francisco, CA 94117)
An intuitive, immersive, movement-based interface and system provides for navigating through large collections of multidimensional information. The interface allows users to navigate through large document collections by maintaining a constant density of visual information presented on a display device to the user at any given moment of time. The document collection is organized in an immersive information space, containing various levels of topics and related documents. At each level within the immersive information space contextual information is presented to the user. The contextual information consists of a semantic scale and a pathway to the information they are viewing. An information structure represents the immersive information space of documents. The information structure consists of a collection of documents, and a graph of topics that describe the relationships between the documents. The graph of topics consists of topic nodes that each contain 1) a set of documents that are about that topic, and 2) a set of links to other topics in the structure. The links represent relationships between topics, and indirectly, relationships between the documents. An information structure that represents the collection of documents is used to guide the user to documents of interest and to show relationships between documents. A presentation and interaction model allows navigation through the information structure. The model includes a camera representing a user's focus of attention, and a set of reactable graphical objects representing nodes in the information structure. The interaction model continuously monitors the movement of the camera in relation to the graphical objects and updates the display of the information space.
www.uspto.gov

Intelligent joining system for a relational database (issued patent)

United States Patent 5,701,460
Kaplan , et al. December 23, 1997
Inventors: Kaplan; David L. (Mercer Island, WA); Miller; Andrew R. (Bellevue, WA)
Assignee: Microsoft Corporation (Redmond, WA)
A system for generating a structured query language query to extract data from a database wherein the database includes a schema defined by a plurality of record sources and a plurality of relationships therebetween. The system includes selecting a field set containing at least one field from among said plurality record sources in said database, and determining a minimal path relationship between each of the plurality of record sources in the database that contain at least one field from the field set. The minimal path relationship includes at least one indirect relationship between two of the plurality of record sources in the database that contain at least one field from the field set. Output from the intelligent joining system is a Structured Query Language (SQL) statement in the syntactical form that a database management system can execute. Additional output can include an edge set containing the minimal paths between record sources that contain at least one field from the field set, and a graph of the sub-schema defined by the field set. The output is generated from the above identified inputs in a manner transparent to the database user.
www.uspto.gov

Relational database management system having integrated non-relational multi-dimensional data store of aggregated data elements (patent application)

United States Patent Application 20020194167
Kind Code A1
Inventors: Bakalash, Reuven; (Shdema, IL) ; Shaked, Guy; (Beer Sheva, IL) ; Caspi, Joseph; (Herzlyia, IL)
Correspondence Name and Address: Thomas J. Perkowski, Esq., P.C.
Bakalash, Reuven ; et al. December 19, 2002
Improved method of and apparatus for joining and aggregating data elements integrated within a relational database management system (RDBMS) using a non-relational multi-dimensional data structure (MDD). The improved RDBMS system of the present invention can be used to realize achieving a significant increase in system performance (e.g. deceased access/search time), user flexibility and ease of use. The improved RDBMS system of the present invention can be used to realize an improved Data Warehouse for supporting

on-line analytical processing (OLAP) operations or to realize an improved informational database system or the like.
www.uspto.gov

Système de stockage d'information et système de recherche d'information

Numéro de publication : WO0175672 (brevet hollandais)
Date de publication : 11.10.2001
Déposant(s) : DE VRIES, Frens, Henri
L'invention concerne un système de recherche fonctionnant avec une base de données dont la classification est réalisée selon de nombreux niveaux. A chaque niveau, une vue d'ensemble des classes du niveau inférieur, auxquelles il est possible d'accéder à partir de la classe en cours, est projetée sur un écran. L'utilisateur peut atteindre l'une de ces classes de niveau inférieur en cliquant sur l'emplacement correct de la vue d'ensemble projetée. Les vues d'ensemble sont projetées sur un arrière-plan fixe, divisé en boîtes, de façon que l'arrière-plan reste le même lorsqu'on change de niveau. A tous les niveaux, le nombre de classes auxquelles on peut avoir accès est le même. Si ce nombre est égal à 20, la base de données peut contenir 100000 informations auxquelles on peut accéder au moyen de seulement quatre clics de souris.
www.inpi.fr

Bases de données à valeurs de paramètres améliorées

Numéro de publication : WO0167300 (brevet US)
Date de publication : 13.09.2001
Déposant(s) : FISH, Robert
La présente invention concerne des bases de données à paramètres de valeurs améliorées et des procédés de leur utilisation permettant des avantages notables aux individus en ce qui concerne le chargement de données et/ou pour effectuer des recherches. Sous un premier aspect la base de données est utilisée en vue d'identifier correctement les recoupements entre les données de recherche et les données cibles où les ensembles de données contiennent une combinaison de valeurs simples, de valeurs multiples, et des plages de valeurs. Sous un deuxième aspect, les items sont chargés dans les bases de données sous la forme de couples de paramètres de valeurs, avec des sous-ensembles desdits couples mis davantage en sous-corrélation à diverses fins, comprenant l'établissement d'un ordre d'affichage, d'ordre chronologique, ou de couplage de regroupements de couples de valeurs de paramètres. Sous un troisième aspect, les utilisateurs peuvent ajouter de nouveaux paramètres à la base de données de sorte que la base de données développe un système de classification évolutif propre à l'utilisateur. Sous un quatrième aspect, les utilisateurs disposent d'une liste de mots ou d'autres valeurs leur procurant une assistance dans leurs recherches dans la base de données, et les listes se réduisent au fur et a mesure par l'utilisation de filtres. Les bases de données et leurs procédés trouvent leur application concernant des informations qui ne sont pas nécessairement disponibles sur le marché, notamment les sondages d'opinion, des informations scientifiques, des informations juridiques, et des informations d'ordre général.
www.inpi.fr

Federated searches of heterogeneous datastores using a federated datastore object (patent application)

United States Patent Application 20020026443
Kind Code A1
Chang, Daniel T. ; et al. February 28, 2002
Inventors: Chang, Daniel T.; (San Jose, CA) ; Donn, Siyi Terry; (Saratoga, CA) ; Hembry, Douglas Michael; (Los Gatos, CA) ; Lee, Tae Jae; (Cupertino, CA) ; Soetarman, Basuki N.; (Los Gatos, CA) ; Summers, Robert N.; (San Jose, CA) ; Tung, Frank C.; (Saratoga, CA)
Correspondence Name and Address: SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
A computer method and system capable of searching multiple heterogeneous datastores with heterogeneous data types by employing an object oriented data model to define a federated datastore object. The federated query object translates a generic query into the appropriate queries for each datastore, the federated datastore object acts as a virtual datastore for multiple heterogeneous datastores with the ability to map concepts between datastores, and the federated collection object represents results from a federated query in a hierarchy that maintains sub-grouping information from each datastore to allow accessing of results by datastore or as a single collection of results. The federated objects thus provide user applications with enhanced accessibility of different hierarchies of information, as well as more robust search capabilities.
www.uspto.gov

Method and apparatus for navigating multiple inheritance concept hierarchies (issued patent)

United States Patent 6,085,187
Carter , et al. July 4, 2000
Inventors: Carter; Gary Lee (Woodbridge, CT); Fohn; Steffen Michael (Raleigh, NC); Greef; Arthur Reginald (Seattle, WA); Hansen; Gregory Christopher (Fort Lee, NJ)
Assignee: International Business Machines Corporation (Armonk, NY)
A method and apparatus for navigating a concept hierarchy that interrelates a hierarchical presentation of the concepts of the hierarchy with a presentation of the declarations and constraints of those concepts is provided. The method includes the use of an additional computer screen presentation in which the presentation of the concepts and their declarations and restraints are interrelated. The user uses the screen to generate either a dictionary of the terms of all the concepts in the hierarchy, or a dictionary of descriptive terms of all the properties associated with those concepts. Means are provided on the screen for a user to then interrogate the generated dictionary for a desired property or concept. In a search of a dictionary of concept terms, once a desired property concept or property has been located and selected, the screen server provides, for use in continuing the search, a list of the properties that define the selected concept. If the search is of a dictionary of property terms, selection of a property produces a list of related concept terms. Irrespective of whether the list is of concept or property terms, the user can then select a term from the created list as an entry point into a tree view of the hierarchy or property presentation of a concept.
www.uspto.gov

Object relationship management system (issued patent)

United States Patent 6,292,804
Ardoin , et al. September 18, 2001
Inventors: Ardoin; Jean-Louis (Clamart, FR); Eade; Richard M. (Madison, AL); Patience; Robert (Huntsville, AL); Falasse; Alain (Paris, FR); Brann; Dave L. (Huntsville, AL); Attilio; Gerard J. (Madison, AL); Arce; Alfredo (Madison, AL)
Assignee: Intergraph Corporation (Huntsville, AL)
A method for maintaining relationships between entities in a computer system, each entity having a plurality nodes, includes the steps of: modifying one of the plurality of nodes; searching for a plurality of dependent nodes from the plurality of nodes coupled to the one node; ordering the plurality of dependent nodes into an order; and evaluating the plurality of dependent nodes in the order.
www.uspto.gov

Method for retrieving dictionary where retrieval is executed with lattice as key and its method

Publication number : 09-134369
Date of publication of application : 20.05.1997
Int.CI. G06F 17/30
Application number : 07-292989 (71)Applicant : FUJITSU LTD
Date of filing : 10.11.1995 (72)Inventor : OGAWA TOMOYA

PROBLEM TO BE SOLVED: To execute retrieval at high speed with lattice structure data as an original by retrieving a corresponding record in a try dictionary while tracing data nodes in a composite key consisting of plural data nodes which are organically combined. SOLUTION: A lattice information managing module 12 consists of the plural data nodes which are organically combined so as to manage information of the composite key adding the plural retrieving keys. A dictionary retrieval control module 13 inspects whether or not the record corresponding to a pass till the respective data nodes in the middle exists in the try dictionary while tracing the data nodes in order from the top to the end in the composite key. When the corresponding record exists, it is taken-out as a retrieval result. A dictionary retrieval state information managing module 14 stores information expressing the position of the data node to be retrieved in the composite key and the retrieval result obtained by the dictionary retrieval control module 13 and an output device outputs the retrieval result as the candidate character string of a recognition result.

Parcours de lecture / historique des consultations :

Requête : history + information retrieval + reading

Context-based and user-profile driven information retrieval

Patent Number: US6256633
Publication date: 2001-07-03
Inventor(s): DHARAP CHANDA (US)
Applicant(s): PHILIPS CORP (US)
A user is enabled to navigate through an electronic data base in a personalized manner. A context is created based on a profile of the user, the profile being at least partly formed in advance. Candidate data is selected from the data base under control of the context and the user is enabled to interact with the candidates. The profile is based on topical information supplied by the user in advance and a history of previous accesses from the user to the data base.
http://ep.espacenet.com

Information access

Patent Number: EP1098258
Publication date: 2001-05-09
Inventor(s):
Applicant(s): BRITISH TELECOMM (GB)
An apparatus and method are provided for accessing sets of information stored in an information system. A user submits search criteria to an information retrieval tool (120) via a user interface (132). From those sets of information referenced in a corresponding response by the information retrieval tool (120), the user may indicate at the user interface (132) that one or more are relevant. The identity of each relevant set of information is noted by a monitor (135) and recorded in a store (140) together with a history of search criteria used on this and subsequent occasions to retrieve the relevant set of information. For each set of information identified in the store (140), a weighting is calculated for each corresponding search criterion, the weighting being indicative of the proportion of users who, on using the search criterion with the retrieval tool (120), identified the set of information and found it relevant. Documents identified in the store (140) may be grouped by information category and those search criteria having a weighting in excess of a predetermined threshold in respect of each document in the group are identified for use in subsequent searches in that information category.
http://ep.espacenet.com

Method for integrating a knowledge-based system with an arbitrary database system (issued patent)

United States Patent 4,930,071
Tou , et al. May 29, 1990
Inventors: Tou; Frederich N. (Sunnyvale, CA); Hasan; Wagar (Allahabad, IN)
Assignee: IntelliCorp, Inc. (Mountain View, CA)
A method and system are provided for mapping between an application relational database of arbitrary structure and an application knowledge base in order to permit a user to draw inference through a knowledge base. Also included are procedures for translating knowledge base queries into database queries, for transforming data retrieved from the database into units (structured objects) in the knowledge base and for updating a relational database based on changes made to the application

knowledge base. These procedures are supported by general purpose knowledge bases. The method includes providing mapping knowledge bases for storing the mapping between an arbitrary relational database and the application knowledge base. The mapping between classes in the application knowledge base and the relations on a database is stored explicitly in units in a user mapping knowledge base. These units are called class maps. The mapping between the slots of a class in an application knowledge base and the attributes of the above relations on the database is stored explicitly in a slot of the class map corresponding to the class.
www.uspto.gov

Information providing method, information providing device, and terminal therefore

Publication number : 2003-006225
Date of publication of application : 10.01.2003
Applicant : NEC CORP
Inventor : ISHIGURO YOSHIHIDE
PROBLEM TO BE SOLVED: To efficiently obtain the information which has been retrieved or read at office or at home, at later time in a situation when the information becomes necessary in a mobile environment without imposing any burden to a user at all.
SOLUTION: In an information providing server 1, a user ID, a retrieval request ID, a retrieval condition, and a retrieval result are related and kept up in a retrieval history DB 104 as the historical information relevant to the past retrieval requests from a user terminal 3. Responding to a retrieval request containing the retrieval condition designated by the user terminal 3, an information retrieval in accordance with this retrieval condition is carried out by a document retrieval means 103, and also responding to this retrieval request, a history retrieval for the past retrieval requests matching both in user ID and designated retrieval conditions from the history information held in the DB 104 is carried out by a history retrieval means 105. The retrieval information obtained through the retrieval of the document retrieval means 103 and the information related to the past retrieval request by the history retrieval means are combined by a result display creation means and the result screen information is transmitted to the user terminal.
www.jpo.go.jp

Method and system for information retrieval, and recording medium having information retrieval program recorded thereon

Publication number : 2001-344274
Date of publication of application : 14.12.2001
Applicant : NEC CORP
Inventor : SAKATA KAZUHIRO
PROBLEM TO BE SOLVED: To make easily retrievable information in a short time in accordance with the needs of each user.
SOLUTION: In this information retrieval method, a prescribed retrieval object database is retrieved in response to a retrieval request from a user, and information requested by the user is read out from this database and is provided for the user. The retrieval history of each user is registered in a prescribed personal information storage part, the retrieval history of a user is retrieved at the time of a retrieval request from this user, and (a) information in the retrieval history is provided to the user if information meeting the retrieval request exists on the retrieval history as the result of retrieval, but (b) the retrieval object database is retrieved if information meeting the retrieval request does not exist in the retrieval history.
www.jpo.go.jp

Information retrieving method, information managing method and system

Publication number : 2001-109752
Date of publication of application : 20.04.2001
Applicant : TOSHIBA CORP
Inventor : AMANO NORIO
PROBLEM TO BE SOLVED: To efficiently perform retrieval by utilizing the past retrieval experiences in the case of retrieving a database. SOLUTION: The target information of a retriever is retrieved and collected by reading the retrieval condition of the retriever at a graphical user interface for database retrieval offered by an information retrieval system, and a retrieval history consisting of retrieval information till obtaining information contents in parallel with the retrieval processing at that time, the title of the obtained contents and link information is also temporarily stored and recorded. After the retriever confirms, eliminates and arranges the temporarily stored retrieval history, the retrieval history is classified independently from normal information and registered in a retrieval history database 10, and the registered retrieval information is referred to and offered to the retriever when the information retrieval of a new similar target is performed.

Document retrieval device and computer readable recording medium recorded with program for functioning computer as a device

Publication number : 11-045267
Date of publication of application : 16.02.1999
Applicant : JUST SYST CORP
Inventor : UKIKAWA KAZUNOBUUKIKAWA HATSUKOTAKATO ATSUSHIARAI YOSHIYA
PROBLEM TO BE SOLVED: To contribute to information analysis and the creation of a new value. SOLUTION: A retrieval server 103 is provided with a retrieval software 105 for inputting retrieval conditions from a client 100, retrieving a pertinent document, extracting a noun phrase from the document of a retrieved result, imparting a score corresponding to statistic information such as an appearing frequency and distribution, etc., in the document of the retrieved result and the document of a retrieval object and extracting the noun phrase of the score pertinent to extraction conditions set beforehand as the relating word of the retrieval conditions and a retrieved result history management software 106 for storing and managing at least the retrieval conditions, the retrieved result by a retrieval means, the relating word extracted in a relating word extraction means and a date on which the retrieval is performed as retrieved result history. In this case, the client 100 reads the retrieved result history managed by the retrieved result history management software, displays it on a screen and performs the retrieval and analyzes information by utilizing the retrieved result history.

Système d'annotation

Requête : information retrieval + annotation

System, method, and computer program product for creating sub notes linked to portions of data objects after entering an annotation mode (issued patent)

United States Patent 6,389,434
Rivette , et al. May 14, 2002
Inventors: Rivette; Kevin G. (Palo Alto, CA); Rappaport; Irving S. (Palo Alto, CA); Jackson; Adam (Sunnyvale, CA); Ahn; Don (Menlo Park, CA); Florio; Michael P. (Atherton, CA); Kurata; Deborah (Pleasanton, CA)
Assignee: Aurigin Systems, Inc. (Cupertino, CA)
Systems, methods, and computer program products for annotating documents are described herein, wherein in some embodiments the documents are immutable. The method operates by enabling a user to place an application in an annotation mode. An annotation is created, and then linked to a portion of an immutable data object. Location information is displayed proximate to the annotation mode location information indicates a location of the linked portion in the data object.
www.uspto.gov

Requête : « annotation system »

Procédé d'annotation de documents informatiques, et système associé

Numéro de publication : FR2829656
Date de publication : 14.03.2003
Déposant(s) : EMERIS TECHNOLOGIES Société anonyme
Inventeur(s) : VITRICHTCHAK ILIA, KHONINEV ALEXANDER, YAKIMOV ANTON, AUDINET PATRICK
L'invention conceme un procédé d'annotation par un utilisateur d'un document informatique rendu accessible sur un réseau par un serveur de documents, le procédé comprenant :
. l'appel par l'utilisateur d'un document informatique à partir d'un poste d'utilisateur,
. l'activation de fonctions d'annotation de document sur le poste d'utilisateur,
. la mise en oeuvre par l'utilisateur desdites fonctions d'annotation pour créer des annotations et les associer au document,
caractérisé en ce que ladite activation de fonction d'annotation est déclenchée par une instruction intégrée dans le fichier source du document informatique, ladite instruction appelant des moyens permettant de mettre en oeuvre lesdites fonctions d'annotation, lesdits moyens résidant sur un serveur d'annotations. L'invention conceme également un système pour la mise en oeuvre d'un procédé caractérisé en ce que le système comprend un serveur d'annotations relié au réseau.
http://www.inpi.fr/brevet/html/titre/index.htm

Collaborative document annotation system

Patent Number: WO0056055
Publication date: 2000-09-21
Inventor(s): OVSIANKIN ALEXANDER; SIDEMAN GIL; DEMENTIEV ROMAN; EINTRACHT ZVIKA
Applicant(s): RTIMAGE LTD (IL)
Requested Patent: EP1186159 (WO0056055), A3
IPC Classification: H04N
Equivalents: AU3188600
Cited Documents: US5831615; US5832474; US5806079; US5826025; US5870559
A system for collaborative document annotation (40) whereby notes or annotations associated with a document, such as an image or text document, are stored on a web server (54). The documents and

associated annotations are treated independently from each other whereby separate data structures are created for the documents and for the associated annotations. A web server application on the server side functions to capture special requests from one or more client applications (42) for creating, storing, editing and retrieving annotations related to specific documents located in the server (54). A Notes Server (58) functions to log all annotation activities along with information about the corresponding clients (42) that create, edit and provides the tools necessary to permit the user to create, edit, and retrieve them. On the client side a Notes Client software application, that is implementable as a web browser Plug-In (44), functions to display the document that the user wishes to annotate and provides the tools necessary to permit the user to create, edit, retrieve and store notes. A synchronization process transmits the annotations generated by the user from the client (42) to the server (54).
http://l2.espacenet.com/espacenet/viewer?PN=EP1186159&CY=ep&LG=en&DB=EPD

Système et procédé d'annotation d'informations médicales relatives à un patient

Numéro de publication : WO0241230
Date de publication : 23.05.2002
N° de priorité : US60/249,575
Indice principal CIB : G06F-019/00
Déposant(s) : SIEMENS MEDICAL SOLUTIONS USA, INC.
Inventeur(s) : AUER, John, E., RUTLEDGE, Jolyn
Selon l'invention, dans un système compatible de réseau servant à afficher des informations médicales dérivées d'une pluralité de sources, un appareil à interface utilisateur comprend un processeur de communication destiné à acquérir des données médicales relatives à un patient, un processeur établissant des priorités pour des données médicales relatives à un patient acquises, de manière à les afficher dans un ordre souhaité et de manière à identifier des paramètres spécifiques affichés desdites données en réponse à une commande de sélection de l'utilisateur et un générateur d'affichage permettant de générer une fenêtre en réponse à l'activation d'une icône affichée. La fenêtre affichée comprend automatiquement les paramètres affichés identifiés spécifiés, ainsi que des messages texte entrés par l'utilisateur.
http://www.inpi.fr/brevet/html/titre/index.htm

Procédé et dispositif de saisie et de restitution d'annotations pour un contenu électronique non modifiable

Numéro de publication : WO0142978
Date de publication : 14.06.2001
N° de dépôt : WOUS0033081
Indice principal CIB : G06F-017/24
Déposant(s) : MICROSOFT CORPORATION
Inventeur(s) : BEEZER, John, L., DEMELLO, Marco, A., DUNIETZ, Jerry, J., KEELY, Leroy, B., VIKRAM, Madan, SILVER, David, M., THACKER, Charles, M.
La présente invention concerne un système et un procédé de saisie d'annotations pour un contenu électronique non modifiable. Une fois qu'on a déterminé qu'une annotation doit être créée, le système détermine l'emplacement de fichier de l'objet sélectionné. Cet emplacement de fichier de l'objet sélectionné est mémorisé avec l'annotation créée dans un fichier ou une partie non lecture seule d'un fichier servant au stockage du document. Grâce à l'emplacement de fichier, l'annotation peut être correctement identifiée avec l'objet sélectionné, sans modifier le document non modifiable.
http://www.inpi.fr/brevet/html/titre/index.htm

A method and system for suggesting related documents

Patent Number: EP0902380
Publication date: 1999-03-17
Inventor(s): GOLOVCHINSKY GENE (US); SCHILIT WILLIAM N (US); WEISER MARK D (US); PRICE MORGAN N (US)
Applicant(s): XEROX CORP (US)
IPC Classification: G06F17/30
EC Classification: G06F17/30A
Equivalents: JP11242549
Cited Documents:

The document reading system passively analyzes a document to generate margin or end notes of references to other documents that relate to annotated passages in the document or to the entire document. The invention is responsive to the annotation of a document to passively generate a query that retrieves documents that have similar content to the annotated passage. The retrieved documents are available to the reader through selectable links placed in the margin near the annotation. Additionally, the invention provides end notes with links to documents that are similar in content to the overall content of the annotated document. The invention assists the reader by passively generating selectable links to related documents to assist the user in relating the new document to previously read material.

http://l2.espacenet.com/espacenet/viewer?PN=EP0902380&CY=ep&LG=en&DB=EPD

CONCLUSION

Ces différents résultats font ressortir que :

- le principe de réseaux de description (dans le sens d'une classification améliorée des données sous forme d'interdépendances des entités, créatrices de sens et destinées à faciliter le travail de l'utilisateur) est abordé sous différentes formes et utilise, à présent, des technologies assez développées, telles que celles permettant une classification automatique sur le principe de relations sémantiques…
- le système de parcours de lecture est aussi abordé, mais de façon moindre (aux vues des résultats obtenus). Les réponses aux requêtes ont montré que ce système est plutôt perçu comme un historique des consultation (la seule ayant fourni des résultats pertinents étant paradoxalement « history + information retrieval + reading ») et reste, a priori, encore peu exploité dans un sens qui pourrait dépasser la simple fonctionnalité d'historique.
- les principes plus généraux d'hypermédia, bibliothèque numérique, paraissent totalement banalisés et surexploités, et ne représentent, de toute façon, pas l'essence du projet.
- le concept d'aide au travail des experts est abordé essentiellement sous un axe de travail sur l'information spécialisée (information académique, médecine, pharmacie, classification des brevets…). Les brevets obtenus ne sont pas forcément assimilables au concept de Porhyre. Le principe de recherches et échanges au sein d'une communauté ne paraît pas abordé en tant que point central, mais reste sous-entendu. Il pourrait peut être plus concerner des systèmes de Knowledge Management (gestion des connaissances).
- Le principe de système d'annotation paraît assez répandu, mais cependant il semble peu exploité dans le sens où le fait Porphyre, c'est à dire, conserver l'évolution de travaux d'experts et échanger au sein d'une communauté.

Le nombre de brevets pouvant être assimilables en tant que tels, au projet Porphyre, est donc assez restreint.

NOTES

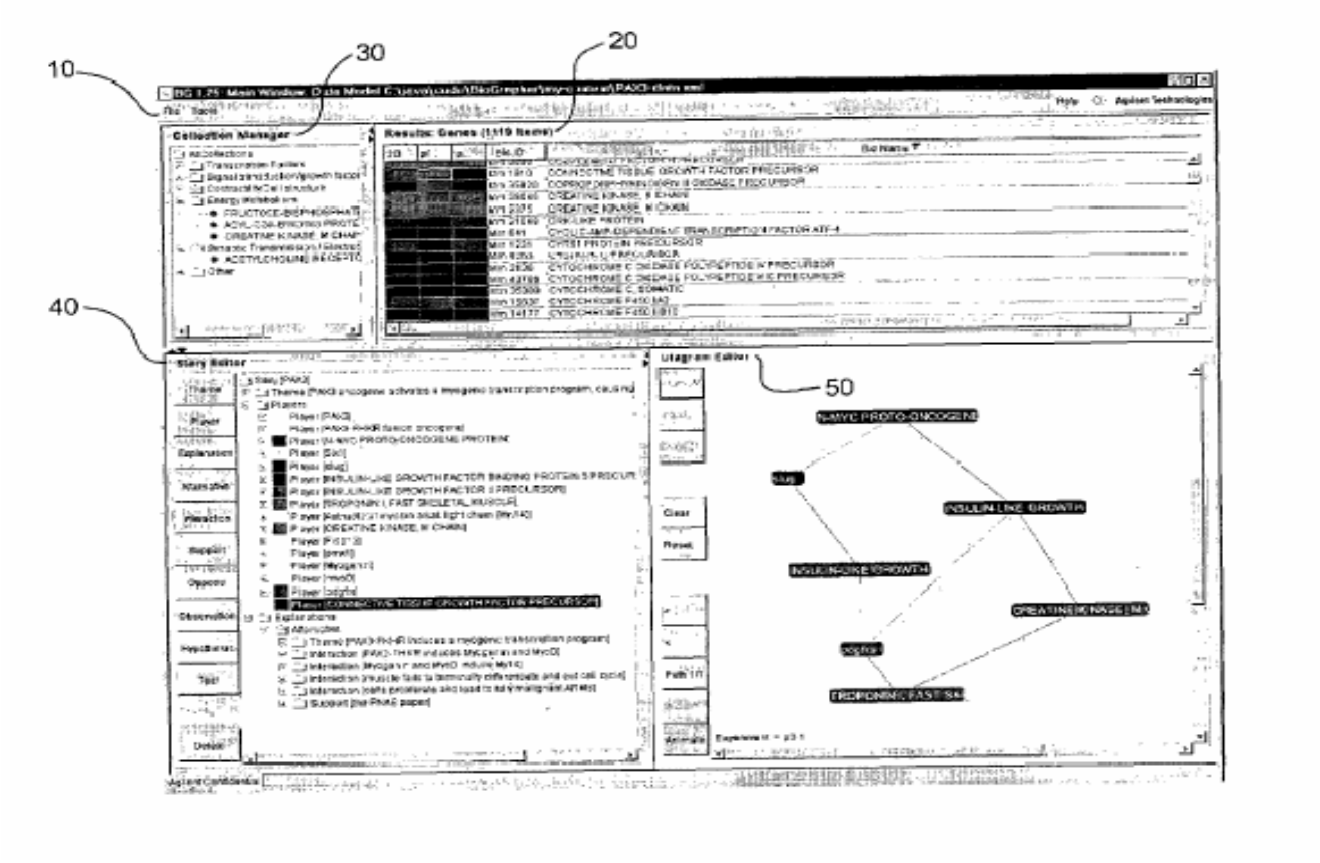
Concernant les dates de publication des brevets présentés ci-dessus, il ressort effectivement que la majeure partie sont postérieures à 2000. Il doit bien entendu être pris en compte qu'une période de 2 ans en moyenne est nécessaire entre la demande et la publication du brevet. Seuls les brevets de l'INPI sont limités à 2 ans d'ancienneté. Les autres sites recouvrent donc une période beaucoup plus large. Concernant les brevets issus de l'USPTO, tous ont effectivement été délivrés. La différence de dénomination entre les brevets, vient du fait que, depuis le 15 mars 2001, il y a eu modification de la législation. A compter de cette date, les Etats Unis se sont alignés sur la France, soit une période de 18 mois obligatoire avant que le brevet soit délivré, le brevet tombant dans le domaine public au bout de 20 ans. L'ancienne législation ne permettait de publier que les brevets délivrés.
A savoir que des brevets peuvent se trouver dans les deux catégories suivant la date de dépôt.
Les termes utilisés dans les requêtes ont fourni des résultats également sur des périodes antérieures. Cependant ces résultats n'apparaissaient pas forcément pertinents. En effet, si la vague de l'hypermédia se situe entre 1992 et 1996, les produits qui en sont sortis paraissent avoir une visée beaucoup plus basique que les brevets plus récents. C'est toute la différence que l'on peut trouver entre une simple bibliothèque numérique et Porphyre. Je pense qu'actuellement les produits visent, à partir des fondement posés en hypermédia durant les années 92-96, à créer une véritable valeur ajoutée. De plus, la montée des sciences de l'Information et de la Communication, alliée à celle des technologies peut expliquer le développement de ce type de produits à l'heure actuelle.

ANNEXES

Brevets à approfondir, présentés avec le résumé, la première figure, et le lien permettant de consulter directement le texte intégral.

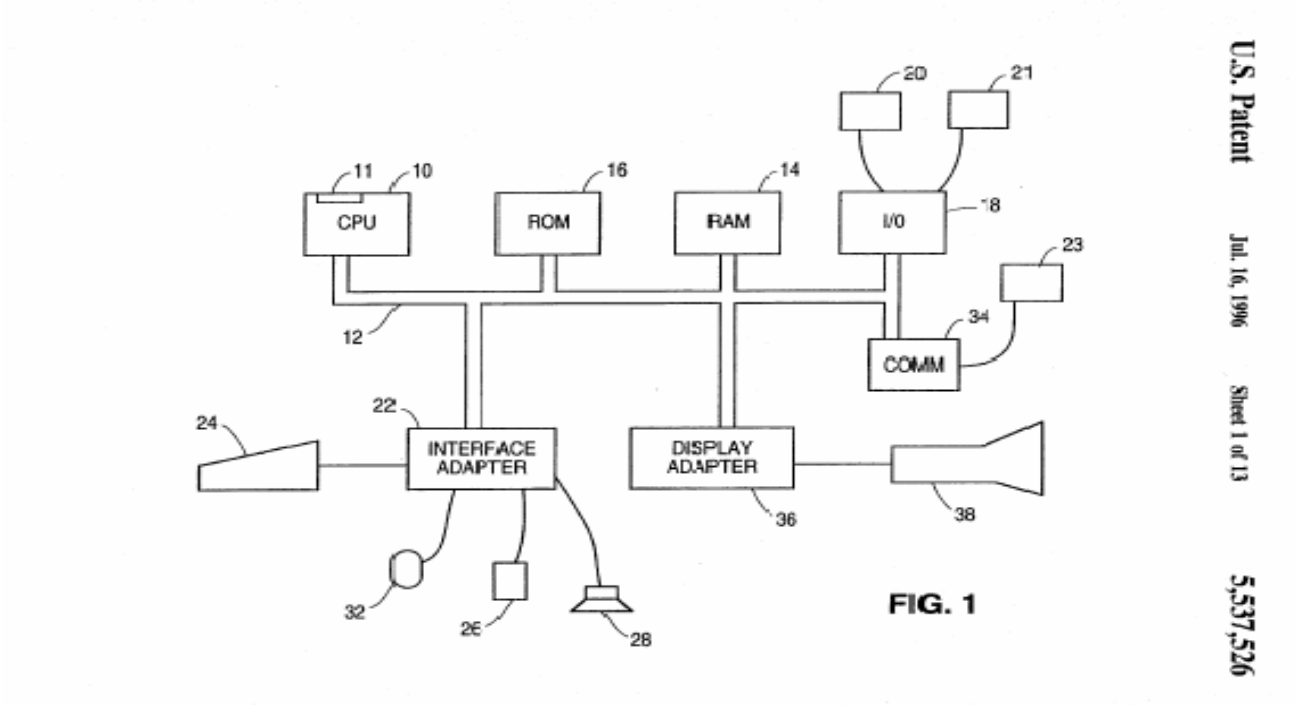
US2002178185 Database model, tools and methods for organizing information across external information objects
http://l2.espacenet.com/espacenet/viewer?PN=US2002178185&CY=ep&LG=en&DB=EPD

An interactive software system provides a framework, methodology, and tools for organizing information during speculative phases of research using a narrative structure. The system provides interactive tools and techniques for organizing, sharing, and using diverse information at multiple levels of abstraction through coordinated multiple-view visualization in the process of hypothesis formation. Annotation and collaboration are supported



US5537526 Method and apparatus for processing a display document utilizing a system level document framework
http://l2.espacenet.com/espacenet/viewer?PN=US5537526&CY=ep&LG=en&DB=EPD

An object-oriented compound document architecture provides system level support for document processing features. The object-oriented compound document framework supports a variety of document processing functions. The framework provides system level support of collaboration, linking, eternal undo, and content based retrieval, among other things. System level support is provided for document changes, annotation through model and linking, anchors, model hierarchies, enhanced copy and pasting, command objects, and a generic retrieval framework.



WO0163382 Conceptual factoring and unification of graphs representing semantic models
http://l2.espacenet.com/espacenet/viewer?PN=WO0163382&CY=ep&LG=en&DB=EPD

Techniques for factoring one or more source graphs into a composite graph containing nodes representing analogous elements of the source graphs and a variability graph containing nodes representing differences in the source graphs. The composite graph is made by taking analogous input trees from the source graphs and traversing the trees from top to bottom looking for nodes in each tree at each level that are analogous to the nodes at that level in the other input trees. The sets of analogous nodes are found by first automatically correlating the nodes in the level currently being examined. Correlation may, for example, be based on similar values of a property of the nodes being correlated. Representations of the sets of correlated nodes are then displayed to a user, who indicates which sets of correlated nodes are in fact analogous. The user may also indicate that the nodes in a set of correlated nodes are not analogous or that nodes that were found by the automatic correlation not to be autonomous are in fact. The analogous nodes are allocated to a corresponding node at a corresponding level in the composite graph; the other nodes are allocated to a set of anomalous nodes. One application for the techniques is managing graphs which are models of catalogs of items.

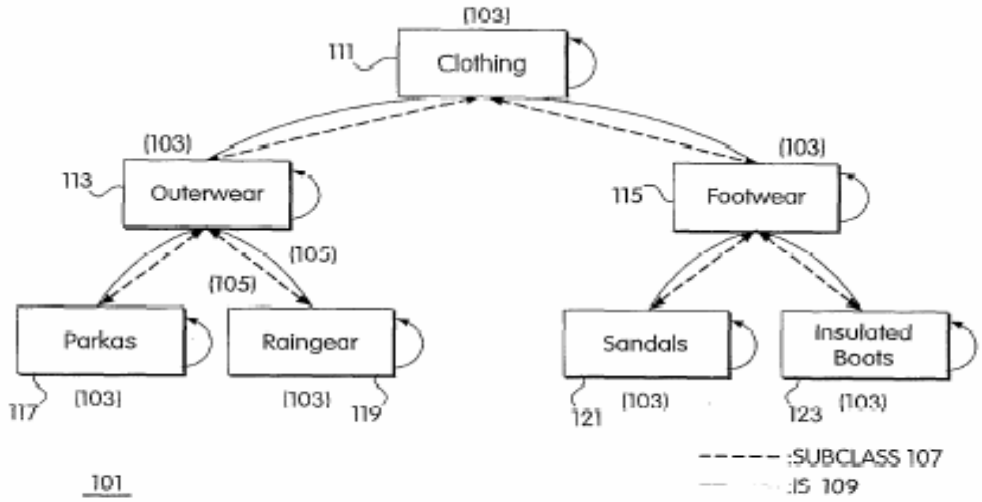

(103)
111
Clothing
(103)
113
Outerwear
(103)
115
Footwear
(105)
(105)
Parkas
Raingear
Sandals
Insulated Boots
117
(103)
(103)
119
121
(103)
123
(103)
:SUBCLASS 107
:IS 109
101

Fig. 1

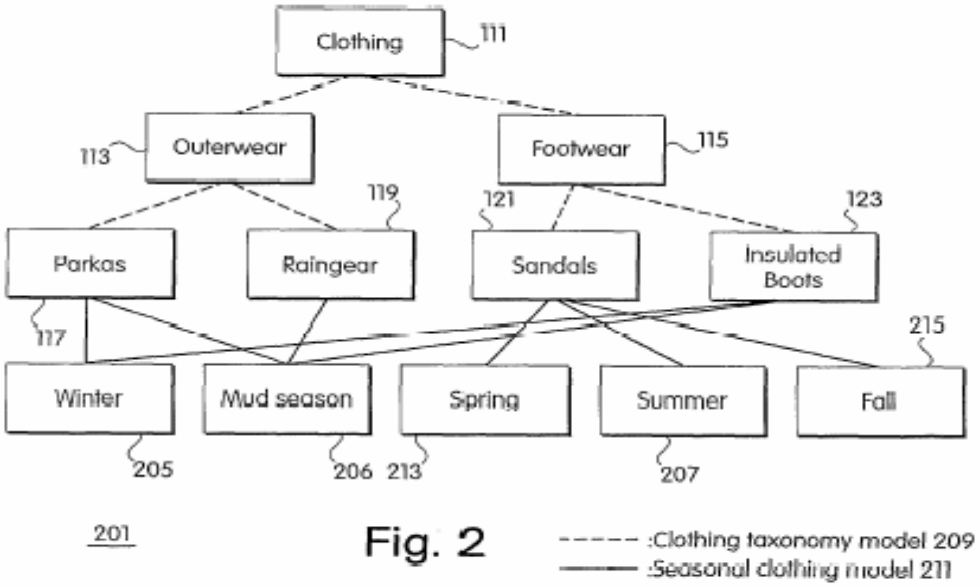

Clothing
111
113
Outerwear
Footwear
115
119
121
123
Parkas
Raingear
Sandals
Insulated Boots
117
215
Winter
Mud season
Spring
Summer
Fall
205
206
213
207
201
:Clothing taxonomy model 209
:Seasonal clothing model 211

Fig. 2

EP1211613 Dynamically generating multiple hierarchies of inter-object relationships based on object attribute values
http://l2.espacenet.com/espacenet/viewer?PN=EP1211613&CY=ep&LG=en&DB=EPD

The described arrangements and procedures dynamically generate a data polyarchy from information received from a data store (e.g., a directory or database). The data polyarchy represents multiple hierarchies of inter-object relationships based on values of attributes of the objects. These multiple hierarchies are generated and represented in a manner that is independent of object naming and predetermined hierarchical data structures.

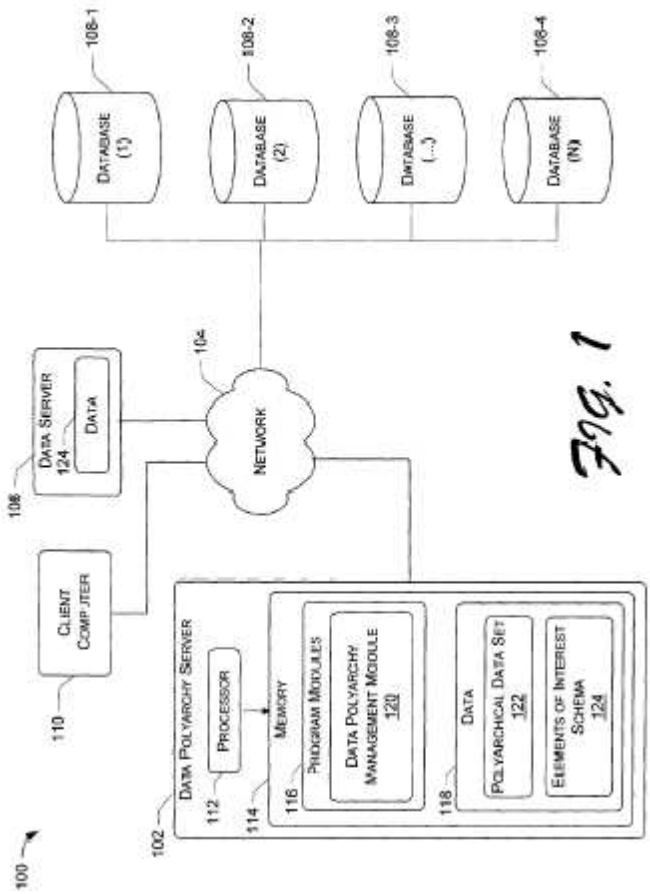
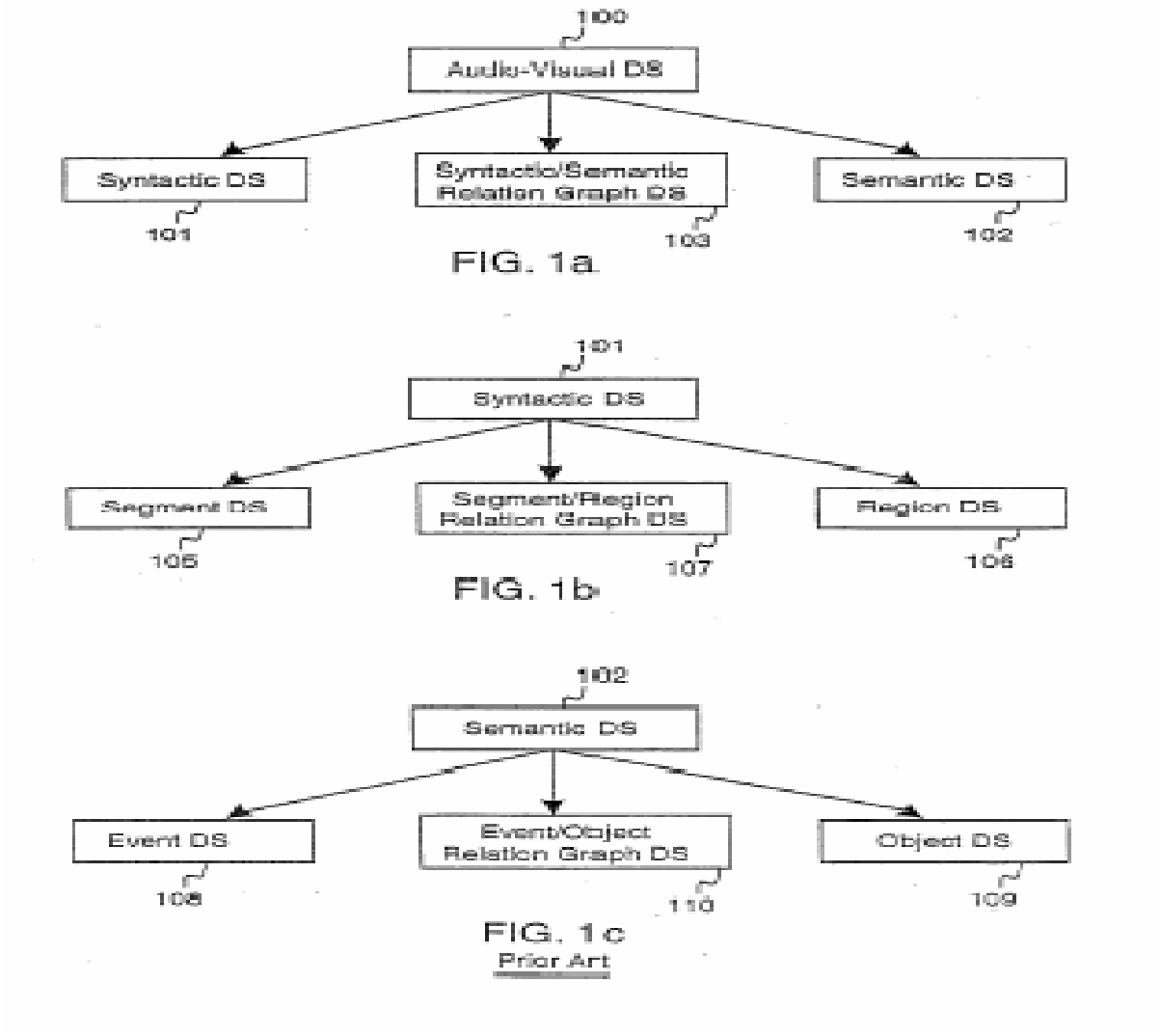


Fig. 1

EP1132832 Method for representing and comparing multimedia content according to rank
http://l2.espacenet.com/espacenet/viewer?PN=EP1132832&CY=ep&LG=en&DB=EPD

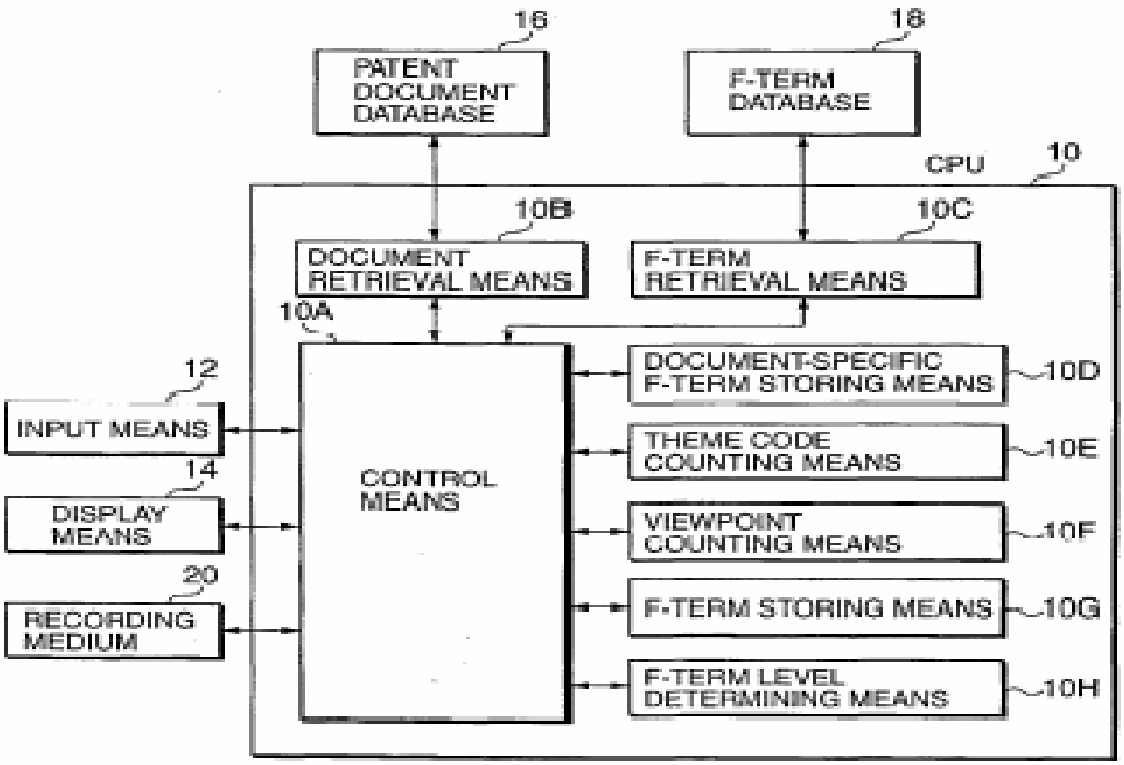
A method for generating a representation of multimedia content by first segmenting the multimedia content spatially and temporally to extract objects. Feature extraction is applied to the objects to produce semantic and syntactic attributes, relations, and a containment set of content entities. The content entities are coded to produce directed acyclic graphs of the content entities, where each directed acyclic graph represents a particular interpretation of the multimedia content. Attributes of each content entity are measured and the measured attributes are assigned to each corresponding content entity in the directed acyclic graphs to rank order the multimedia content



EP1213665 Patent classification displaying method and apparatus
http://l2.espacenet.com/espacenet/viewer?PN=EP1213665&CY=ep&LG=en&DB=EPD

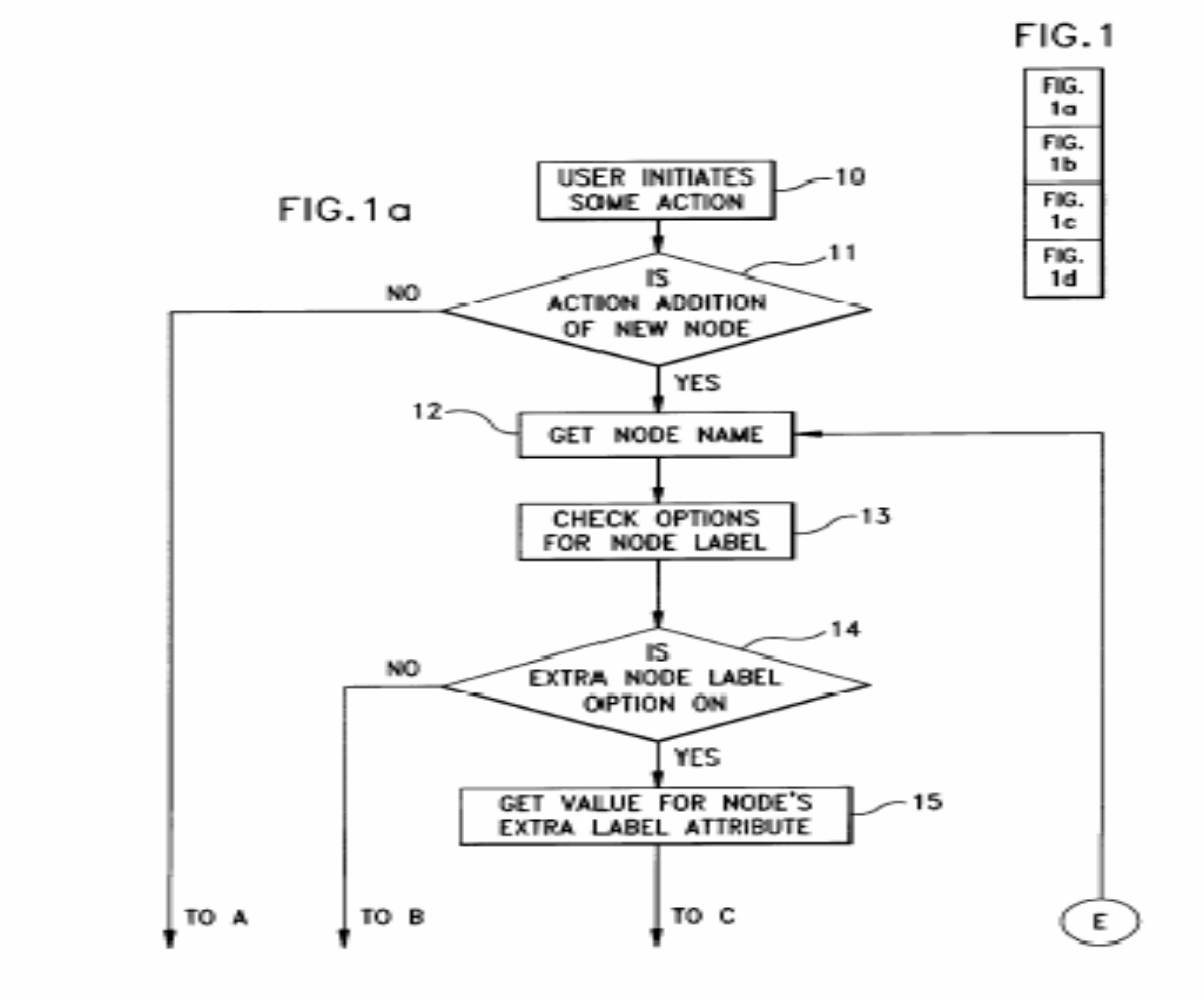
There is provided a method for displaying the classification of a patent document to which multi-viewpoint patent classifications are added. The method makes it possible to grasp the patent document from a variety of viewpoints more than those obtained from the "Abstract" of the patent document without reading the specification, and hence improve the efficiency of patent research. The method comprises the steps of: (a) retrieving multi-viewpoint patent classifications added to the patent document; (b) using a database storing a multi-viewpoint patent classification table to read out multi-viewpoint patent classifications higher in hierarchy than each of the multi-viewpoint patent classifications retrieved; and (c) displaying, together with their titles, at least either the multi-viewpoint patent classifications retrieved or the higher levels of hierarchy. Each of the multi-viewpoint patent classifications includes theme codes, viewpoints and sub-devided viewpoints so that the theme codes and/or the viewpoints of the multi-viewpoint patent classifications added to the patent document may be listed and output in the descending order of the frequency of their occurrence.

FIG. 1



US6055515 Enhanced tree control system for navigating lattices data structures and displaying configurable lattice-node labels
http://l2.espacenet.com/espacenet/viewer?PN=US6055515&CY=ep&LG=en&DB=EPD

The objective of the instant invention is to define a computer user interface display system that presents hierarchical data in an enhanced tree presentation control that blends the ease-of-use character of the familiar "tree presentation control" with a technique for navigating more complex lattice data structures, while at the same time providing more node information by displaying configured lattice-node labels along with the node's name. Thus a primary objective of this invention is to facilitate building, maintaining and using a multiple inheritance taxonomy such as a product catalog data base by means of a multi-navigation path browsing system, which is made possible through the capability of this system's multiple inheritance capability; with indicators in the tree view to indicate ancestors such as immediate parents and further removed ancestors.



US6505209 Poly vectoral reverse navigation
http://l2.espacenet.com/espacenet/viewer?PN=US6505209&CY=ep&LG=en&DB=EPD

This invention includes a method of navigating a collection of nodes by selecting a first node, generating a context list and displaying first node and context list. Each context of the context collection includes a second node essentially referencing the first node. Another aspect of the invention includes a method of generating an address from a collection of contexts containing steps of receiving a selected attribute collection and generating the address. Each context includes a resolution address and an attribute collection. Each of the attribute collections contains at least one attribute. Whenever the attribute collection of a first context of the context collection is essentially the same as the selected attribute collection, the resolution address of the first context is selected as the generated address. Another aspect of the invention includes a method of navigating a hypergraph. The hypergraph includes at least one context list. Each context list contains at least one context. Each context includes a node. The method includes steps of selecting a first context list of the context lists, selecting a first context of the first context list, and displaying the node of the first context of the first context list. Aspects of this invention include computer programs implemented on computer readable media, situated both local to a user and in client-server configurations

Dessin (fig.1) non intéressant

WO0167300 Improved parameter-value databases
http://l2.espacenet.com/espacenet/viewer?PN=WO0167300&CY=ep&LG=en&DB=EPD

Improved parameter-value databases and methods of using the same provide significant benefits to individuals loading data and/or conducting searches. In one aspect the database is used to properly identify overlap between search data and target data where the data sets contain any combination of single values, multiple values, and ranges. In another aspect items are loaded onto the database as sets of parameter-value pairs, with subsets of such pairs being further sub-correlated for various purposes, including establishing display order, chronological order, or coupling groupings of parameter-value pairs. In another aspect users are allowed to add new parameters to the database in such manner that the database develops a user-evolved categorization system. In yet another aspect users are presented with word or other value lists to assist them in searching the database, and the lists become smaller as filters are applied. The databases and methods are applicable to information that is not strictly marketplace information, namely opinion surveys, scientific information, legal information, and general information.