



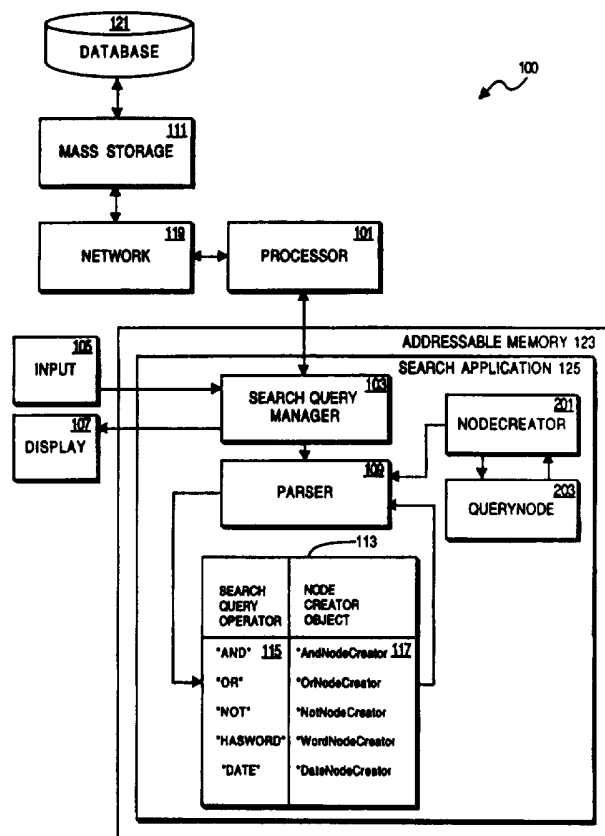
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(54) Title: IMPLEMENTATION INDEPENDENT EXTENSIBLE QUERY ARCHITECTURE FOR INFORMATION RETRIEVAL SYSTEMS

(57) Abstract

An information retrieval system incorporates an extensible query architecture allowing an applications programmer to integrate new query models into the system as desired. The query architecture is based on an abstract base class of query nodes, or code objects that retrieve records from the database. Specific subclasses for particular query models are derived from the base class. Each query node class includes a search function that iteratively searches the database for matching records. Query node objects are instantiated by associated node creator class objects. A parser is used to parse a search query into its components, including nested search queries used to combine various query models. The parser determines the particular search operator keywords, and the node creator object for instantiating the appropriate query node object for each search operator. The node creator objects return pointers to the created query nodes, allowing the parser to assemble complex hierarchical query nodes that combine multiple query models.



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 95/16496

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 G06F

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON DATA ENGINEERING, VIENNA, APR. 19 - 23, 1993, no. CONF. 9, 19 April 1993, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 484-493, XP000380206 PAEPCKE A: "AN OBJECT-ORIENTED VIEW ONTO PUBLIC, HETEROGENEOUS TEXT DATABASES" see abstract --- -/--	1

☒ Further documents are listed in the continuation of box C.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+ 31-70) 340-3016

Authorized officer

Fournier, C

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International Application No
PCT/US 95/16496

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON DATA ENGINEERING, KOBE, JP, APRIL 8 - 12, 1991, no. CONF. 7, 8 April 1991, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 472-481, XP000325909 VRBSKY S V ET AL: "AN OBJECT-ORIENTED QUERY PROCESSOR THAT PRODUCES MONOTONICALLY IMPROVING APPROXIMATE ANSWERS" see page 474, right-hand column, line 20 - page 475, left-hand column, line 9 see page 478, right-hand column, paragraph 4 - page 480, left-hand column, paragraph 5 -----	1