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(54) Title: SYSTEM AND METHOD FOR PROVIDING CROSS-DIMENSIONAL COMPUTATION AND DATA ACCESS IN AN ON-LINE ANALYTICAL PROCESSING (OLAP) ENVIRONMENT

(57) Abstract: A system (10) for generating a value for a first attribute includes a database (16) having one or more dimensions (30) that each include one or more members (32). The database (16) includes one or more storage locations (22) that are each associated with one member (32) from each dimension (30) in a set of one or more of the dimensions (30). A server (14) evaluates an expression including at least one second attribute that depends on a set of one or more of the dimensions (30), the expression mapping at least one member (32) of a first dimension (30) on which the first attribute depends to at least one member (32) of a second dimension (30) on which the second attribute depends. The value for the first attribute is generated according to the expression. The server (14) and database (16) may operate in an on-line analytical processing (OLAP) environment.



## INTERNATIONAL SEARCH REPORT

Internation polication No PCT/US 01/06824

a. classif IPC 7	G06F17/30				
According to	International Patent Classification (IPC) or to both national classificat	ion and IPC			
B. FIELDS	SEARCHED				
Minimum do IPC 7	cumentation searched (classification system followed by classification $G06F$	n symbols)			
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Electronic da	ata base consulted during the international search (name of data base	e and, where practical, search terms used)	) ·		
EPO-In	ternal, IBM-TDB				
C. DOCUMI	ENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the rele	vant passages	Relevant to claim No.		
A	US 5 905 985 A (MALLOY WILLIAM EA AL) 18 May 1999 (1999-05-18) column 1, line 40 - column 3, lin 		1-43		
Furt	her documents are listed in the continuation of box C.	χ Patent family members are listed	in annex.		
'A' document defining the general state of the art which is not considered to be of particular relevance  'E' earlier document but published on or after the international filling date  'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  'O' document referring to an oral disclosure, use, exhibition or other means  'P' document published prior to the international filling date but		later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  (*document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  3. document member of the same patent family  Date of mailing of the international search report			
6	February 2004	12/02/2004			
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 Veen, G			

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Information on patent family members

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Pa cited	atent document I in search report		Publication date		Patent family member(s)		Publication date	
US	5905985	Α	18-05-1999	NONE			<u> </u>	
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