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Datasheet for the decision of 24 June 2014

Case Number: T 1079/09 - 3.5.01

Application Number: 03019592.9

Publication Number: 1513083

IPC: G06F17/60, G06F17/30

Language of the proceedings: EN

Title of invention:
Provision of data for data warehousing applications

Applicant:
SAP AG

Headword:
Data warehousing/SAP

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

Catchword:

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Case Number: T 1079/09 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 24 June 2014

Appellant: (Applicant)	SAP AG Dietmar-Hopp-Allee 16 69190 Walldorf (DE)
Representative:	Müller-Boré & Partner Patentanwälte PartG mbB Friedenheimer Brücke 21 80639 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 29 December 2008 refusing European patent application No. 03019592.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	S. Wibergh
Members:	R. Zimmermann
	D. Prietzel-Funk

Summary of Facts and Submissions

I. European patent application number 03 019 592.9 filed on 3 September 2003 and published as EP 1 513 083 A1 relates to a computer system for performing data warehousing tasks.

II. The examining division refused the application for lack of inventive step in the light of the common general knowledge and the prior art disclosed in the patent applications US 2002/0161778 A1 (document D1) and US 2003/0130878 A1 (document D2), taking into consideration the three requests then on file. Claim 1 of the second auxiliary request, the request pursued in the subsequent proceedings, reads as follows (bracket [1]<> added for convenience of reference):

"1. A computer network architecture for making procurement-related information that has been generated on a transaction level available to data warehousing techniques, comprising
a transaction processing layer (16);
a data warehousing layer (12) for gathering and accumulating information provided by the transaction processing layer (16);
a data sourcing layer (18) interfacing the transaction processing layer (16) and the data warehousing layer (12), the data sourcing layer including a source data base (36) for storing data received from the transaction processing layer (16); and
an extractor (38) interfacing the data warehousing layer (12), for moving data from the source data base (36) to the data warehousing layer (12);
characterised by
at least one accounting component (16a) and an electronic procurement component (16c) included in the

transaction processing layer (16), the accounting component (16a) having a general ledger data base (30) for centrally storing information contained in accounting-related data sets received from the electronic procurement component (16c) and from one or more other components (16a, 16b) of the transaction processing layer (16), the accounting-related data sets being comprised of one or more data lines and containing procurement-related information; and
a duplicator (32) receiving the accounting-related data sets that will be or have been stored in the general ledger data base (30), for selectively delivering duplicates of such accounting-related data sets that fulfill a predefined criteria in a procurement context;
an analyzer (34) for analyzing the duplicated data sets delivered by the duplicator (32) and for adding transfer information to the duplicated data sets, the transfer information controlling at least one of the extraction of data from the source data base (36) and the transfer of extracted data in the data warehousing layer (12);
wherein the source data base (36) stores the duplicated data sets on a data line level and the extractor (38) is configured to selectively move data contained in data lines [1]<> to the data warehousing layer (12) under control of the transfer information and wherein the data warehousing layer (12) is configured to receive two different data streams, a first data stream (22) being received via the source data base (36) from the accounting component (16a) and a second data stream (20) bypassing the data sourcing layer (18) being received directly from the electronic procurement component (16c)."

III. According to the examining division, the invention was an embodiment of the general "blueprint" system shown

in figure 1 of document D1. The differences were obvious implementation details or design options. In particular the provision of two parallel data streams for extracting, transforming, and loading document-related data from the two different transactional data sources, the general ledger database 30 and the electronic procurement database 16c, into the data warehousing layer, was an obvious solution for improving the speed of the data loading process: the skilled person would be aware on the one hand of the structure of the transactional system and where and in which format the data were stored and on the other hand of the explicit hint in document D1, paragraph 0026 that a second parallel data stream could be used for loading data directly from a transactional data source to the warehousing layer.

IV. The decision of the examining division was appealed by the appellant (applicant) on the basis of a main and an auxiliary request, both requests filed together with the statement setting out the grounds of appeal. Claim 1 of the new requests corresponded to the second auxiliary request before the examining division (see point II above), except for being in one-part form and for the following amendments: at passage [1]<> above, the feature "or sets of data lines" was inserted in claim 1 of both requests; and in the auxiliary request, the following text was added at the end of the claim: "wherein the first data stream (22) also comprises procurement-related information generated by the one or more other components (16a, 16b) of the transaction processing layer (16) different from the electronic procurement component (16a)".

V. According to the appellant, the invention was based on the unexpected insight that a conventional procurement

data warehouse could be improved by enriching the data generated and provided from the electronic procurement (EP) component (16c in fig.4 and fig.5A) through adding procurement-related information extracted from the general ledger (GL) database (30 within the accounting component (AC) 16a). This non-technical administrative concept was technically implemented by means of a novel and inventive network architecture, which allowed to transfer efficiently specific datasets from the general ledger database, as one of the data sources. Document D1 was not a suitable starting point for assessing inventive step since it referred to a different transactional system not comprising the accounting and electronic procurement components which provided the specific problem underlying the present invention.

The inventive contribution of the invention over the prior art resided in a two-stream solution providing a direct loading of the data extracted from the EP component and a parallel two-stage selection for the data extracted from the general ledger database of the accounting component. This resulted in an efficient transfer process and produced the synergistic effect that the selection criteria could be fine-tuned without affecting the direct data stream from the EP component. Document D1 mentioned a parallel data feed, but it failed to disclose any specific association between the data transported via the direct data stream and the data transported through the cleansing and profiling module 30. Document D2 was a more relevant piece of prior art. However, neither of these documents provided a hint or an incentive which could have motivated the skilled person to provide such a two-stream solution for moving procurement-related data to a data warehousing system.

VI. In a communication pursuant to Article 15 (1) RPBA issued for preparation of oral proceedings, the Board made provisional observations on the merits of the appeal, indicating that it considered the refusal of the application as well as the reasons given for lack of inventive step as essentially correct. The relevant definitions in the claims would not be construed as constructional features of a computer network architecture or of the operational steps of a data processing method, but rather as conceptual features of a methodology or at best as functional features of a computer program product. The invention could be realised using constructionally different computer network architectures. The number and type of data sources and the number and kind of data processing steps defined in the claims were a direct consequence of a non-patentable concept of business data management and did thus not contribute to inventive step. Such a concept would have been given to the skilled person or team in advance, as a non-technical framework or requirement specification, with the task to implement the concept in an information system. The skilled person would then start out for example from the blueprint architecture disclosed in document D1 or the procurement data management system disclosed in document D2, or from any general kind of computer network. Hence, the oral proceedings had to concentrate on the question of inventive step.

VII. Following the summons to oral proceedings, the appellant filed a letter dated 23 May 2014, specifying further its requests and arguments in support of its appeal. The appellant repeated that the technical

problem solved by the invention was more efficiently to extract and transfer procurement-related information to provide a complete and consistent data view in a data warehousing application. Physically separating the data transported via either data stream allowed fine-tuning of the selection criteria without affecting, e.g. delaying, the conventional data transport directly from the EP component to the data warehousing layer. As a result, the selection feature and the feature of the two separate data streams synergistically co-operated to enhance the data transfer from the transaction processing layer to the data warehousing layer.

VIII. By letter dated 16 June 2014, the appellant advised the Board that neither the applicant nor its representative would attend the oral proceedings and requested a decision according to the state of file.

IX. The oral proceedings took place as scheduled on 24 June 2014, in the absence of the appellant. The Board verified the appellant's requests filed in writing. They were that the decision of the examining division be set aside and that a patent be granted on the basis of the claims according to the main or the auxiliary request filed with the statement setting out the grounds of appeal.

Reasons for the Decision

1. The admissible appeal is not allowable since in the light of the facts on file the decision under appeal stands up to scrutiny and the reasons of lack of inventive step remain valid for claim 1 of the present requests.

2. Regarding the statement setting out the grounds of appeal, the Board has already given its (then provisional) opinion that the reasons given for the refusal were essentially correct, drawing attention in particular to the non-technical and conceptual framework underlying the claimed invention (see point VI above).

3. The appellant made a reply in its letter dated 23 May 2014 (see point VII above), essentially summarising the arguments already forwarded in the grounds of appeal. The appellant put particular importance on the technical efficiency allegedly achieved by the two-stream approach using one data stream for direct transfer of procurement-related information and a second for transfer of procurement-related information via a two-stage selection process. This created a synergistic effect, namely the possibility of fine-tuning the selection criteria in the two-stage selection process without affecting in any way the conventional (direct) data transport.

4. The Board cannot accept this interpretation of the invention. Since the fine-tuning of selection criteria does not affect the other data stream, as the appellant points out, there can be no synergistic effect. The examining division concluded from paragraph 0026 of document D1 that providing two data streams was an obvious choice (decision under appeal, end of point 3.3). The Board agrees that this was indeed an obvious measure in order to improve the data loading process, an object within the normal task distribution of the skilled person (see also paragraph 0048 ff., in particular paragraph 0052 of document D1, specifying the functions of the skilled person).

5. There is no evidence for any other improvement of technical efficiency. The two-stage selection process to which the appellant referred is basically predetermined by the business content and the predefined format of the transactional data. The organisation of the required data processing steps in different stages and layers is, from a technical point of view, a matter of normal system development and design for implementing the respective business requirements.

6. Thus the subject-matter of claim 1 of the main request does not involve an inventive step (Article 56 EPC).

7. Claim 1 of the auxiliary request additionally states that the first data stream also comprises procurement-related information generated by the one or more other components of the transaction processing layer different from the electronic procurement component. This feature relates to the origin of the data transmitted, which in its turn may simply depend on whether employees choose to use electronic procurement or not for giving their orders (cf. paragraph 0007 of the description). The feature is therefore regarded as motivated by non-technical considerations which cannot involve an inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek S. Wibergh

Decision electronically authenticated