Case Number: T 0959/03 - 3.5.01
Application Number: 98963827.5
Publication Number: 1049966
IPC: G06F 1/00, G06F 17/60
Language of the proceedings: EN

Title of invention: Universal shopping center for international operation

Applicants
Pool, Ed, et al

Opponent:
-

Headword:
International transactions/ED POOL

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
T 0769/92, T 0641/00, T 0172/03

Catchword:
-
DECISION of the Technical Board of Appeal 3.5.01 of 29 September 2006

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Decision under appeal:
Decision of the Examining Division of the European Patent Office posted 20 November 2002 refusing European application No. 98963827.5 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: S. Steinbrener
Members: R. Zimmermann
G. Weiss
Summary of Facts and Submissions

I. European patent application number 98 963 827.5, International publication number WO-A-99/34272 titled "Universal Shopping Center for International Operation", concerned a system and process for carrying out international purchasing of goods over the internet using computer to computer communications. Priority was claimed from an earlier US patent application filed in December 1997.


III. The examining division classified the subject-matter of the application as a method of doing business excluded from patentability under Article 52(2)(c) and (3) EPC, and refused the application. The decision was posted 20 November 2002.

IV. Against the refusal decision, the applicants (appellants) lodged an appeal, filing the notice of appeal together with a debit order in respect of the appeal fee on 17 January 2003. The written statement setting out the grounds of appeal was filed together with two sets of claims titled as "main request" and "auxiliary request", respectively, and an affidavit from Mr. Ed Pool, named as co-inventor and co-applicant, on 20 March 2003.

The main request included, as independent claims, a method claim (claim 1) and a system claim (claim 12), the auxiliary request only a system claim having the
same wording as in the main request. This common system claim reads as follows:

"A computer system for electronically assisting in a transaction, comprising a terminal means arranged:
to accept a language input from a customer selecting a language in which to view catalogue information on products;
to accept a currency input from the customer selecting a currency in which to obtain a price of the products;
to accept one or more inputs from the customer selecting one or more products to be purchased and a destination for said selected products to be purchased, and on receipt of the inputs to trigger the calculation of costs involved in moving said selected products, including the cost of selected products,; and
to accept order input from the customer to order said selected products,
characterized by
a means for calculating all costs involved in moving said selected products, including the cost of the selected products and payment of international taxes and duties, to an international destination, and
a means for generating an electronic title including the content of a commercial invoice for goods subject to said transaction."

V. The Board summoned the appellants to oral proceedings. In an annex to the summons, the Board indicated as a provisional opinion that the examining division appeared to have been right on the facts but refused the application on the wrong grounds. The conclusion should rather have been lack of inventive step.
VI. The oral proceedings took place as summoned on 29 September 2006, at which however the appellants were not represented as announced to the Board by letter dated 22 September 2006. The proceedings were continued on the basis of the state of the file, i.e. in particular on the basis of the appellants' submissions filed on 20 March 2003 and the summons issued by the Board on 14 July 2006. After deliberation, the Board has given its decision.

VII. The decision is based on the appeal requests as filed in writing, i.e. that the decision under appeal be reversed and a patent be granted on the basis of the sets of claims filed on 20 March 2003.

VIII. According to the written submissions, the application was related to a method of operating an improved user interface for international transactions, and to a system having a terminal with such an improved user interface which proved to have technicality, novelty, and inventive step. Although the complex sequence of financial transactions might not be patentable per se, the computer system for assisting such transactions was patentable since the considerations required to implement the system had technical character and were novel and inventive. The situation was similar to that in T 769/92 - Management system/SOHEI (OJ EPO 1995, 525), where a user interface for use in a financial and inventory management system was found patentable.

In the present case, the steps of calculating all costs in moving the product, triggering electronic funds authorisation, and generating the electronic title also required considerable technical considerations in
carrying out the complex calculations and complying with a wide variety of technical standards. The requirement for a common user interface capable of accepting a language input and displaying the products in that language required the technical considerations of designing an interface and of programming a database to deliver the suitable data. Page 11, line 20 to page 13, line 20 of the application spelled out the technical considerations needed to deliver this data.

Document D1 was the closest prior art. The two-part form of claim 1 had been rearranged accordingly, taking into account the prior art of document D1. The features distinguishing the claimed method from this prior art were the step of calculating all costs involved in moving products to an international destination and the step of generating an electronic title including the content of a commercial invoice.

These were not routine steps, but technical features providing an important inventive contribution over the prior art by greatly improving the user interface and increasing the speed of processing international transactions if compared with prior transaction processing systems.

Document D1 referred to international transactions in passing only, at page 8 lines 15 to 16. It did not disclose any suitable process for calculating all costs involved in moving the selected products to an international destination, not to mention the payment of international taxes and duties. All that D1 described was getting a quote from a shipper, but completely ignoring the complexity of importing and
exporting goods across national borders which the present invention specifically seeks to address.

The decision T 641/00 - Two identities/COMVIK (OJ EPO 2003, 352) clarified that a non-technical problem could legitimately be part of the problem to be solved, in particular as a constraint that must be met. Indeed, the right question was not whether there was any technical merit in the problem to be solved, but whether the claimed solution to the problem had technical character. Many inventions related to solutions to human needs, many of which needs were themselves non-technical. The problem in the present case was to deliver a transaction system capable of dealing with the very real complexities of international transactions.

Generating an electronic title including a commercial invoice was an essential technical feature of the present invention. To trigger electronic funds transfer inevitably required knowledge of the technical standards and complex technical authorisation and approval systems that inevitably existed in any electronic payment system. The electronic title itself needed to be compatible with a wide variety of technical standards, and this again required technical considerations. The method and apparatus claimed were neither a computer implementation of a pre-existing process. The affidavit from the inventor clearly set out a typical example of an earlier process and how it differed from the invention.

According to the affidavit annexed to the statement of grounds, the phrases "electronic title" and "commercial
invoice" as used in the claims are to be understood as terms of art in the context of international trade. In particular, the term "commercial invoice" served both to designate a bill for the goods sold to the buyer as well as a document used by national governments to control imports. It provided information about the exporter, consignee, intermediate consignee, forwarding agent, bill of lading number, export references, etc. Some processes that became critical within the guise of international transactions were non-existent in a domestic transaction. The documents necessary to establish ownership, for example, varied in accordance with the type of the international transaction.

The complexity of the various processes in international transactions became major barriers for most individuals and businesses. Because of this complexity, prior non-electronic systems for carrying out international transactions had required a large amount of human input and expertise, as well as time and effort, to generate the required documents including the commercial invoice. Prior approaches to automation had not been capable of automatically calculating the complete costs of an international transaction before an order was received. It could actually take from one to two weeks to finalize the total costs for such a transaction.

It was also not possible to generate an electronic title including the commercial invoice.

In international trading, there was no suitable process for implementation available or known prior to the present invention. Prior systems, like the one
described in document D1, were limited to simple domestic commercial transactions, and failed to address or solve the many complexities inherent and unique to international transactions.

Reasons for the Decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rules 1(1) and 64 EPC and is thus admissible.

2. The appeal, however, is not allowable since the computer system claimed in both claim requests fails to meet the requirement for an inventive step as set out in Articles 52(1) and 56 EPC.

3. In the practice and case law of the EPO, the so-called problem-solution method is applied for assessing inventive step (see e.g. the 4th edition of "Case Law of the Boards of Appeal of the European Patent Office", European Patent Office 2002, Chapter I.D). Essentially, this approach denies inventive step if starting from the prior art at least one path existed before the date of priority which directed a skilled person to the claimed invention in the light of the objective technical problem to be solved.

In case of a "mixed-type invention", intermingling technical and non-technical aspects, an aim to be achieved in a non-technical field may legitimately appear in the formulation of the technical problem (see decision T 641/00 - Two identities/COMVIK, OJ EPO
2003, 352). Inventive step, however, is decided only on the basis of the technical contribution provided by the invention to the prior art, i.e. the contribution which brings about an advance in the technical field. The examination for patentability thus normally requires an analysis of the invention and the construction of the claims to determine the technical content of the claimed subject-matter as a prerequisite step (see also T 172/03 - Order management/RICOH, not publ. in OJ EPO, point 3 with further citations).

4. The present system claim defines a "Computer system for electronically assisting in a transaction". As pointed out by the appellants, the term "transaction" used in the claim should be understood as a term of art within the context of international trading; this follows from the description of the invention, e.g. pages 9 f. of the application, as well as from the claim wording referring to "moving ... products ... to an international destination". A transaction in this sense thus encompasses all such business activities which arise from commercial practice, or are required by commercial or national laws, in buying, selling, and trading products or services cross-border.

5. All the features recited in the system claim concern directly or indirectly such business activities: viewing catalogue information on products in a (foreign) language, obtaining a price of the products in a (foreign) currency, selecting one or more products to be purchased, selecting an (international) destination for said selected products to be purchased, calculating all costs involved in moving said selected products, including the cost of the selected products and payment
of international taxes and duties, to the international
destination, ordering the selected products, and
generating a commercial invoice for the goods subject
to such a transaction.

These business activities are per se not related to any
technical field; in particular, they do not serve the
solution of any technical problem. There is also no
indication in the claim that the claimed invention
resides in adapting such business activities or the
whole transaction process to any technical use, to
electronic data processing, for example. Because of the
purely commercial nature of these activities they are
not relevant to inventive step; however, they may be
used in the formulation of a technical problem to
define a prescribed constraint to be observed or a
given aim to be achieved in the present commercial
field of international trading.

6. Notwithstanding the means-plus-function format used in
the claim, the definitions imply technical features of
the computer system since the programming of even
purely commercial functions and their implementation on
a computer system require technical expertise and know-
how and may give room for technical problem solutions.
These technical features are the basis for assessing
inventive step in the light of the prior art.

7. Document D1 is an appropriate starting point for
assessing inventive step.

The appellants already delimited the independent method
claim (main request) against this document (see written
statement of 20 March 2003, page 7), i.e. the claim
features of the preamble have been considered to be anticipated, in combination, by document D1. Since the system claim closely corresponds to the method claim, the same conclusion should hold in respect to the system claim.

8. Indeed, document D1 discloses a computer system ("a computer based communications network", see for example document D1, claims 4 and 8) for electronically assisting in a transaction ("engaging in transactions over a data network", "purchasing goods or services over a data network"), comprising a terminal means ("a plurality of terminals") arranged to accept a language input from a customer ("conditions set by the requesting buyer (e.g. language, currency, or vendor location)", see page 6, last line), a currency input from the customer (loc.cit.), and one or more inputs from the customer selecting one or more products to be purchased and a destination for said selected products to be purchased (see, for example, figure 2A, 3rd step and the "buyer's data packet" shown in figure 7). The input of data triggers the calculation of costs involved in moving said selected products, including the costs of selected products (see figure 2B, 1st step). The terminal of the prior art system, furthermore, accepts order input from the customer to order said selected products (see, for example, figure 2B, last step and the "vendor adds to the data packet" shown in figure 7 and the "PRICE QUOTATION" in figure 8, including a "UNIT PRICE" and the shipping costs "UPS GROUND").

9. In addition, the preamble of the system claim should include parts of the characterizing portion of the
claim, namely the feature that the computer system comprises a means for calculating all costs involved in moving said selected products to an international destination, including the cost of the selected products.

In fact, document D1 already discloses cross-border transactions to international destinations (see page 8, lines 15 f. and page 10, lines 15 to 17). Pricing is done automatically (see for example figure 2B, 1st step) and includes the cost of the selected products (see the "PRICE QUOTATION" in figure 8).

10. The Board notes that the "PRICE QUOTATION" is transmitted over a computer network (see page 7, lines 20 to 25) and displays the essential content of a normal commercial invoice or bill, namely the information on the product to be delivered, the price, and possibly the delivery date. It is thus an "electronic title" in terms of the present claim wording. However, the Board accepts the appellants' submission that it does not display all the information normally necessary in the context of international trading, where the commercial invoice serves both as a bill and as a document used by governments to control imports.

11. In summary, the computer system as claimed is distinguished from the prior art of document D1 only by the following features (reference letters added for convenience):
(a) the means for calculating all costs involved are suitable for including the payment of international taxes and duties, and

(b) the means for generating an electronic title are suitable for including, into the electronic title, the content of a commercial invoice for goods subject to an international transaction.

12. These differences can be considered to result from a commercial transaction process as disclosed in document D1, but modified with regard to the payments included into the costs scheme and the content of the electronic title. Since these modifications involve purely commercial considerations, they should be treated as prescribed and given to the skilled person (see above). Hence, the objective technical problem left to the person skilled in technical fields is the implementation of such modifications on a computer system.

13. The solution defined by features (a) and (b) is merely the obvious teaching to provide appropriate (computer) means having such modified functionality. Therefore, at this general level of the claim definition, the computer system does not meet the requirement of inventive step provided for in Articles 52(1) and 56 EPC. Hence, the appeal requests, which seek patent protection for such a computer system, are not allowable.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:       The Chairman:

P. Guidi       S.V. Steinbrener