## Decision of Technical Board of Appeal 3.5.02 dated 22 March 2006 T 388/04 - 3.5.02

(Language of the proceedings)

Composition of the board:

Chairman: W. Wheeler Members: M. Ruggiu

Applicant: Pitney Bowes Inc.

**Headword: Undeliverable mail/PITNEY BOWES** 

P. Mühlens

Article: 52(2), 52(3) EPC

Keyword: "Patentable inventions - business, extent of exclusion"

Headnote

- I. The extent to which subject-matter or activities are excluded from patentability under Article 52(2) and (3) EPC is notionally distinct from, and may be considered independently of, the question of inventive step.
- II. Subject-matter or activities that are excluded from patentability under Article 52(2) and (3) EPC remain so even where they imply the possibility of making use of unspecified technical means.
- III. Subject-matter or activities may be excluded from patentability under Article 52(2) and (3) EPC even where they have practical utility.

## Summary of facts and submissions

- I. This is an appeal of the applicant against the decision of the examining division to refuse European patent application No. 99126154.6.
- II. The reason given for the refusal was that the subject-matter of claim 1 according to the main request, or any of the four auxiliary requests then on file, was excluded from patentability by Article 52(2)(c) and (3) EPC.
- III. Oral proceedings before the board were held on 22 March 2006. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of one of the main, first or second auxiliary requests filed with the grounds of appeal.

- IV. Claim 1 of the main request reads as follows (the references (a) to (e) have been added by the board):
- (a) "A method of responding by a mailer to a notice from a postal service that a mail piece addressed to an addressee is undeliverable, the notice including an endorsement indicating why the postal service was unable to deliver the mail piece, the method comprising the steps of:
- (b) pre-determining a confidence threshold for establishing when to terminate a search of a predetermined set of data sources:
- (c) based on the endorsement made by the postal service, selecting a search pattern from a plurality of search patterns each consisting of at least one search process having a pre-determined search objective, each endorsement corresponding to a predetermined one of the search patterns, each search process programmed to search at least one of the data sources; and
- (d) executing the selected search pattern so as to vary a success factor from an initial value based upon the instantaneous results of the executed search pattern;
- (e) wherein the executing of the search pattern is terminated if the success factor reaches the confidence threshold."

Claims 2 to 5 of the main request are dependent on claim 1.

- V. Claim 1 of the first auxiliary request reads as follows (the references (a) to (h) have been added by the board):
- (a) "A method of responding by a mailer to a notice from a postal service that a mail piece addressed to an addressee is undeliverable, the notice including an endorsement indicating why the postal service was unable to deliver the mail piece, the method comprising the steps of:
- (f) transmitting a query from the mailer to an amalgamated recipient data center including information relating to why the postal service was unable to deliver the mail piece;
- (b) pre-determining a confidence threshold for establishing when to terminate a search of a predetermined set of data sources:
- (c) based on the endorsement made by the postal service, selecting a search pattern from a plurality of search patterns, each consisting of at least one search process having a pre-determined search objective, each endorsement corresponding to a predetermined one of the search patterns, each search process programmed to search at least one of the data sources; and
- (d) executing the selected search pattern so as to vary a success factor from an initial value based upon the instantaneous results of the executed search pattern;
- (e) wherein the executing of the search pattern is terminated if the success factor reaches the confidence threshold;
- (g) transmitting information including the result of the search from the amalgamated recipient data center to the mailer after completion or termination of the search pattern; and
- (h) where the result of the search includes a corrected delivery address, remailing the mailpiece to the corrected delivery address."

Claims 2 to 5 of the first auxiliary request are dependent on claim 1.

- VI. Claim 1 of the second auxiliary request reads as follows (the references (a) to (i) have been added by the board):
- (a) "A method of responding by a mailer to a notice from a postal service that a mail piece addressed to an addressee is undeliverable, the notice including an endorsement indicating why the postal service was unable to deliver the mail piece, the method comprising the steps of:

- (f) transmitting a query from the mailer to an amalgamated recipient data center including information relating to why the postal service was unable to deliver the mail piece;
- (b) pre-determining a confidence threshold for establishing when to terminate a search of data sources;
- (c) based on the endorsement made by the postal service, selecting a search pattern consisting of a plurality of search processes having a predetermined search objective, each search process programmed to search at least one of the data sources; and
- (d) executing the search pattern so as to vary a success factor from an initial value based upon the instantaneous results of the executed search pattern;
- (e) wherein the executing of the search pattern is terminated if the success factor reaches the confidence threshold;
- (g) transmitting information including the result of the search from the amalgamated recipient data center to the mailer after completion or termination of the search pattern;
- (i) wherein at least some of the search processes of a search pattern are executed in parallel; and
- (h) where the result of the search includes a corrected delivery address, remailing the mailpiece to the corrected delivery address."

Claims 2 to 4 of the second auxiliary request are dependent on claim 1.

VIII. The appellant essentially argued as follows:

Claim 1 of all the requests specified a sequence of steps directed to improving the delivery of a mail piece. No objection had been raised as to lack of an inventive step. The only issue in the present case was the "technicality" of the claimed subject-matter. Delivery of a mail piece was a physical process that could be "measured". In other words, it could be decided in any particular case on the basis of objective criteria whether the mail piece had or had not been delivered. Therefore, delivery of mail pieces had to be regarded as a technical process. A mail piece that was returned to a mailer after an unsuccessful attempt to deliver it could, in many cases, have been delivered since the address was in fact correct or could have been corrected. The steps that were carried out in accordance with the invention were targeted to solve a particular real world problem (failure to deliver a mail piece). Part of the invention was to make the search for the correct address more systematic. The result of the invention was a new piece of information that could be used to solve the problem and allow the mail piece to be correctly delivered. In the absence of the method of the invention, the mail piece was returned to the mailer and the purpose of the mail piece was not achieved. With application of the invention, the mail piece could be correctly addressed and therefore delivered in an efficient way. Thus, there was no doubt that the invention made a useful contribution in the delivery of mail and was not of a mere abstract or intellectual character.

It was accepted that the application did not state explicitly that any of the steps of claim 1 was performed by a computer or a processor. However, a person skilled in the art reading the application would inevitably come to the conclusion that each step of the claimed invention and each step of the process shown in Figure 2 of the application should be carried out by a computer, even if in principle certain steps, such as the step of transmitting the query, could be performed manually. Even if some steps were to be performed manually, this should not necessarily lead to the result that the subject-matter was not technical.

Point 4.5 of decision T 258/03 ("Hitachi") held that what mattered having regard to the concept of invention within the meaning of Article 52(1) EPC was the presence of technical character, which might be implied by the physical features of an entity or the nature of an activity, or might be conferred on a non-technical activity by the use of technical means. In particular, the use of technical means could not be considered to be a non-invention as such within the meaning of Article 52(2) and (3) EPC and activities falling within the notion of a non-invention as such would typically represent purely abstract concepts devoid of any technical implications. Furthermore, point 4.6 of the "Hitachi" decision indicated that this comparatively broad interpretation of the term "invention" in Article 52(1) EPC meant that it included activities which were so familiar that their technical character tended to be overlooked, such as the act of writing using pen and paper. Step (c) of claim 1 according to all the requests was illustrated in Figure 3 of the application. Step (c) comprised selecting a search pattern based on the endorsement made by the postal

service. Step (d) of all the requests comprised executing the search pattern. At least these two steps were not purely abstract concepts and thus were sufficiently technical not to fall within the exclusions provided in Article 52(2) EPC, in line with point 4.5 of the "Hitachi" decision. This was even more apparent in view of point 4.6 of the "Hitachi" decision, which indicated that even the act of writing using pen and paper had technical character. The steps (f), (g) and (h) which were included in claim 1 of the first and second auxiliary requests required that information be transmitted between the mailer and a data center and that the mail piece be remailed. In view of the "Hitachi" decision, these steps had to be regarded as technical steps. Step (i), which was included in claim 1 of the second auxiliary request, required that at least some of the search processes of a search pattern be executed in parallel. It was not sufficient to use only pen and paper to perform step (i). Thus, step (i) also had technical character.

The decision under appeal (see paragraph 2.1 on pages 4 and 5) used the word "administrative" to describe the subject-matter of the present invention, with the implication that something which is merely "administrative" necessarily cannot be regarded as an invention, apparently based on decision T 931/95 ("Pension benefits"). In that case, claim 1 was directed to a method of controlling a pension benefits program by "administering" at least one subscriber employer account. According to the "Pension benefits" decision, steps of processing and producing information having purely administrative, actuarial and/or financial character were typical steps of business and economic methods. Thus, the invention in that case did not go beyond a method for doing business as such, which was excluded from patentability. In the present case, the examining division had attempted to apply the argumentation from the "Pension benefits" decision by alleging that the steps of the present case were "administrative" in character. However, this attempt betrayed a misunderstanding of the "Pension benefits" decision and in particular of the word "administrative". Administering a subscriber/employer account meant carrying out financial and/or checking steps in relation to the account. The result of these steps was an account which had been duly "administered" and nothing more.

## Reasons for the decision

- 1. The appeal is admissible.
- 2. Claim 1 of all the requests relates to a method of responding by a mailer to a notice from a postal service that a mail piece addressed to an addressee is undeliverable. The claimed method includes subject-matter or activities that appear to be typical of doing business, such as transmitting information, collecting information, setting goals, and deciding what to do based on the information available. In accordance with Article 52(3) EPC, it is therefore necessary to consider to what extent the European patent application, specifically claim 1 of the various requests, relates to subject-matter or activities as such that shall be excluded from patentability pursuant to Article 52(2) EPC, in particular Article 52(2)(c): schemes, rules and methods for doing business.
- 3. None of the claims of any of the requests explicitly mentions any technical means that might be used to carry out the activities recited therein. Indeed, no technical means are described in the application at all. The board accepts that at least some of the steps specified, in particular step (d), would usually be carried out using a computer. However, the board considers that, in the context of the claimed method, the mere possibility of making use of an unspecified computer for performing a search is not enough to distinguish step (d) from a business activity as such. Similarly, the board considers that transmitting information as specified in steps (f) and (g), even if performing the transmission might involve the use of technical means, does not go beyond a business activity as such. If the contrary were true, no method for doing business that implicitly could make use of a functionality offered by technical means would be excluded from patentability, which, in the view of the board, cannot be what is intended by Article 52(2) and (3) EPC. The board is aware that decision T 258/03 ("Hitachi") (OJ 2004, 575) considered that "activities falling within the notion of a non-invention as such would typically represent purely abstract concepts devoid of any technical implications" (point 4.5 of the "Hitachi" decision). This board takes the view that subject-matter or activities that are excluded from patentability under Article 52(2) and (3) EPC remain so even where they imply the possibility of making use of unspecified technical means.
- 4. The board has no doubt that the method specified in claim 1 of all the requests produces effects that can be objectively verified. In this sense therefore, the claimed method appears to be a "real world" method and not a purely abstract concept. The claimed method may also ensure that the response to a notice that a mail piece is

undeliverable is more systematic and thereby more reliable than if it had to be decided afresh each time how to respond to such a notice. The board is therefore convinced that the claimed method has practical utility. However, what has to be evaluated here is the extent to which the method defined by claim 1 is a method for doing business as such, pursuant to Article 52(2)(c) and (3) EPC, not whether the method is devoid of utility. The "Hitachi" decision tempered its view that only purely abstract concepts devoid of any technical implications are excluded from patentability by taking into account for assessing inventive step only those features which contributed to a technical character (points 5.3 and 5.7 of the decision T 258/03). This board also considers that subject-matter or activities that as such fall within the exclusions provided for in Article 52(2) EPC of course cannot contribute to inventive step. Having regard to Article 52(2) and (3) EPC on the one hand and Article 56 EPC on the other hand, this board considers that the extent to which subject-matter or activities are excluded from patentability is notionally distinct from, and may be considered independently of, the question of inventive step. Therefore, the board feels free to assess the extent to which the claimed method is excluded from patentability before any examination of inventive step.

5. Examination of the extent to which the claimed method is excluded from patentability leads to the following:

Feature (a) specifies the situation to which the claimed method should respond. In the judgment of the board, the situation specified by feature (a) is a typical business situation.

Step (c) concerns a decision as to which search pattern should be selected based on information available from the endorsement made by the postal service. It is implicit that the plurality of search patterns, from which one has to be selected, are directed at collecting information relevant for the addressing of a mail piece. In the view of the board, step (c) is simply an instance of taking a business decision.

In the view of the board, executing a search pattern for retrieving such information, as specified in general terms in step (d), does not go beyond business activity as such.

Step (b), the part of step (d) that relates to varying a success factor, and step (e) collectively define when to terminate the execution of the search pattern. In the view of the board, this is an instance of the setting of a goal and the taking of a business decision.

Both steps (f) and (g) concern transmitting information between business organisations (the mailer and the amalgamated recipient data center). In the view of the board, steps (f) and (g) are typical business activities.

Step (h) consists in remailing a mail piece to a corrected delivery address, which, in the view of the board, is a business activity as such, even if making use of unspecified technical means might be implied.

Executing search processes in parallel (i.e. consulting different data sources simultaneously) defines a procedure using time effectively. Time is an important factor in business. Therefore, the board regards step (i) as being a business method as such.

6. Thus, in the judgment of the board, all the subject-matter or activities specified in claim 1 of all the requests, even though they have practical utility, are to be regarded as particular instances of methods for doing business as such. Therefore, the board concludes that the entire subject-matter of claim 1 of all the requests is excluded from patentability pursuant to Article 52(2)(c) and 52(3) EPC.

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Order

For these reasons it is decided that:

The appeal is dismissed.