

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 17 September 2014**

Case Number: T 0983/11 - 3.5.01

Application Number: 06013246.1

Publication Number: 1739614

IPC: G06Q30/00, G07B17/00

Language of the proceedings: EN

Title of invention:

Intelligent mail system to coordinate direct mail with other marketing channels using mail prediction and mail control

Applicant:

Pitney Bowes Inc.

Headword:

Coordinated marketing/PITNEY BOWES

Relevant legal provisions:

EPC 1973 Art. 56

Keyword:

Inventive step - (no)

Decisions cited:

T 0641/00, T 0844/09



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 0983/11 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 17 September 2014

Appellant: Pitney Bowes Inc.
(Applicant) One Elmcroft Road
Stamford, CT 06926-0700 (US)

Representative: HOFFMANN EITLE
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 8 December 2010
refusing European patent application No.
06013246.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman S. Wibergh
Members: P. Scriven
D. Prietzel-Funk

Summary of Facts and Submissions

- I. This appeal is against the decision of the Examining Division to refuse European patent application 06013246.1 on the grounds of lack of inventive step (Articles 52(1) and 56 EPC).
- II. The Examining Division considered that the invention according to claim 1 of both the main request and the auxiliary request contained a mixture of technical and non-technical features. The Examining Division found that the calculation of arrival dates was a mathematical method directed at an administrative and business-related issue, and, therefore, not technical. The technical character of the invention was considered to reside in the implementation of the non-technical scheme on a notorious computer. The Examining Division decided that the implementation, amounting to nothing more than an automation of the business scheme, would have been obvious to a person skilled in the art.
- III. With the statement setting out the grounds of appeal, the appellant re-submitted the requests underlying the appealed decision, and argued in favour of inventive step.
- IV. In a communication accompanying a summons to oral proceedings, the Board gave its preliminary opinion, agreeing, with the Examining Division, that the claimed invention lacked an inventive step.
- V. The appellant did not reply to the communication.
- VI. Oral proceedings took place on 17 September 2014 in the presence of the appellant's representative. The

appellant's final requests were that the decision under appeal be set aside and that a patent be granted on the basis of the main request or of the auxiliary request submitted with the statement setting out the grounds of appeal.

VII. Claim 1 according to the main request reads as follows:

Computer data processing apparatus for calculating a plurality of dates, the apparatus comprising:

a first recipient database (714) for storing data defining candidates for an offer of a product or service by a mail marketing channel;

a second recipient database (720) for storing data defining candidates for an offer of a product or service by a further marketing channel;

a recipient response database (770) for storing historical response results for previous campaigns;

a recipient selector (730) operable to select candidates that are common to the first and second recipient databases;

an arrival time calculator (740) operable to calculate a probability distribution of predicted arrival dates for delivery of mail pieces to said candidates in a plurality of mailing shipments with each shipment containing a plurality of containers and each container containing one or more mail pieces; and

a contact date calculator (760) connected to the arrival time calculator (740) and the recipient response database (770) and operable to calculate

contact dates on which the selected candidates should be contacted using the further marketing channel, based on the predicted arrival dates and historical response results;

wherein

the apparatus further comprises storage means for storing historical mail piece delivery data comprising an historical container delivery probability curve; and

the arrival time calculator is arranged to calculate the probability distribution of predicted arrival dates for delivery of mail pieces to said candidates by:

(a) generating a shipment prediction delivery curve using an anticipated induction date and induction facility for the mailing;

(b) generating, for each container in the shipment, a container prediction delivery curve by multiplying the historical container delivery probability curve by the mail piece count for the container;

(c) adding each container prediction delivery curve to the shipment prediction delivery curve;

(d) repeating steps (a), (b) and (c) for each shipment; and

(e) adding the shipment prediction delivery curves resulting from step (c).

VIII. The auxiliary request differs from the main request in that claim 1 contains the following additional feature at the end:

"the arrival time calculator is arranged to adjust each container prediction delivery curve generated in step (b) based on induction facility conditions".

IX. The appellant argued that the Examining Division had incorrectly identified the calculation of predicted arrival dates as non-technical.

In the appellant's view, the non-technical business idea of the invention was to predict the arrival dates, and to use these dates to calculate contact dates on which recipients should be contacted using a further marketing channel. That would be the requirement specification given to the skilled person, and the technical problem would, then, be *how* to calculate the arrival dates, i.e. what sort of calculation, using what means, based on what data, derived in what way.

The appellant argued, with reference to decision T 844/09 *"System and method for verifying a financial instrument/PayPal, Inc."* (reasons 5.3), that the business idea would be passed on to the technically qualified person at the point at which technical understanding was required. At this point, there would be a technical problem. According to the appellant, the calculation of predicted arrival dates required an understanding of the mail piece delivery process, which was a technical process involving technical means. The appellant explained that, in the application, the mail pieces were processed automatically using bar codes and RFID tags, which were clearly technical.

The appellant furthermore argued that the various probability curves in claim 1 were indeed mathematics, but applied mathematics in the sense that it was applied to a technical process and taking into account

the variability of the technical means.

- X. The Board announced its decision at the end of the oral proceedings.

Reasons for the Decision

1. *The invention*

- 1.1 The invention concerns the calculation of dates on which people should be contacted for marketing purposes. The idea of the invention is to predict when marketing mail pieces will arrive at recipients' homes, and to use those dates to determine an optimal date on which the recipients should be contacted using a further marketing channel (e.g. telephone, e-mail, television, radio; see the application as filed at page 7, lines 11-14). The intention is to maximise the chances of a successful marketing campaign.
- 1.2 In the mail delivery process according to the invention, a mailing campaign consists of one or more shipments, where each shipment contains a plurality of containers, and each container one or more mail pieces. Each shipment is to be inducted by a carrier (such as the national postal service) at a specific induction facility (page 18, line 29 to page 19, line 3 of the application as filed), for processing and distribution to the recipients.
- 1.3 One part of the invention is the prediction of arrival dates for the delivery of mail pieces. As shown in figure 5 (see also page 22, line 6 to page 23, line 7),

the predicted arrival dates are calculated based on historical delivery data, shipment and container level data, including the mail piece count for each container, and an anticipated induction date and induction facility.

For each container in the shipment, a "container prediction delivery curve" is calculated by multiplying a "historical container delivery probability curve" by the mail piece count for the container. The container prediction delivery curves are added to a "shipment prediction delivery curve", which has been generated by taking into account the "anticipated induction date" and the "induction facility". The process is carried out for each shipment, and the shipment prediction delivery curves are added to generate predicted arrival dates for the mail pieces. The result of the calculation is a probability distribution that indicates the percentage of mail pieces delivered on each day.

2. *Main request - claim 1*

2.1 It is common ground that the subject-matter of claim 1 contains a mixture of technical and non-technical features, and that the approach to be applied for assessing inventive step is the "COMVIK" approach, in which non-technical features may be part of the objective technical problem, for example as a non-technical requirement specification given to the technically skilled person implementing the invention (T 641/00 - "Two identities/COMVIK", OJ EPO 2003, 352). This approach is also used in the decision cited by the appellant (T 844/09).

- 2.2 The point of dispute is the identification of the non-technical features, and in particular whether the calculation of predicted arrival dates, by storing, generating, and manipulating various probability and prediction curves, is technical.
- 2.3 The appellant argued that the calculation of a probability distribution of predicted arrival dates relied on an understanding of the technical mail delivery process which would require technical skill. Therefore, it should be considered as being part of the technical implementation.
- 2.4 Firstly, the Board does not see that claim 1 requires the mail processing to be technical; in particular, it need not be an automatic process. Secondly, even if the claim were amended to include technical features of the mail processing (such as bar codes and RFID tags), the probability distribution could still be determined by simply observing the input and output to the mail delivery process, without any knowledge or understanding of any of the underlying technical processes. According to claim 1, the prediction of arrival dates is based on previous delivery times ("historical mail piece delivery data"), shipment and mail piece information, and an anticipated schedule ("anticipated induction date"). This is a matter of logistics planning which would be dealt with by a person skilled in the application of statistical mathematics to logistics. However, mathematical methods as such do not have technical character (Article 52(2) (a) and 52(3) EPC), and cannot contribute to inventive step.
- 2.5 In the Board's view, technical skill is only required when the calculation is to be automated. This is the

relevant point at which the requirement specification is handed over to the technically skilled person, and the technical problem to be solved is, therefore, how to implement the calculation. The Board agrees with the Examining Division that the solution according to claim 1 does not go beyond the use of a computer to perform the calculation, which would have been obvious to the skilled person. For these reasons, the Board concludes that the invention as defined in claim 1 of the main request does not involve an inventive step (Article 52(1) EPC and 56 EPC 1973).

3. *Auxiliary request - claim 1*

3.1 Claim 1 according to the auxiliary request contains the additional feature that the container prediction delivery curves are adjusted based on "induction facility conditions".

3.2 The appellant argued that "induction facility conditions" referred to technical status information, indicating a delay in the processing and ultimately the delivery of mail. This made clear that the calculation was based on technical consideration.

3.3 The Board does not find this argument convincing. The induction facility conditions could be, for example, that the induction facility is closed on Sundays, holidays or other postal delivery processing exceptions (page 22, lines 20-23) which produce predictable delays in delivery. Such predictions follow from logistical considerations only, and not from any technical information that have to be interpreted using technical skill.

3.4 For this reason, the Board considers that the additional feature of claim 1 of the auxiliary request does not contribute to the technical character of the invention or to inventive step (Article 56 EPC). Therefore, the auxiliary request is no more allowable than the main request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



B. ter Heijden

S. Wibergh

Decision electronically authenticated