Datasheet for the decision
of 10 March 2009

Case Number: T 1108/06 - 3.5.01
Application Number: 94931408.2
Publication Number: 0727072
IPC: G06F 17/60

Language of the proceedings: EN

Title of invention: Electronic bill pay system

Applicant: VISA INTERNATIONAL SERVICE ASSOCIATION

Opponent: -

Headword: Bill pay system/VISA INTERNATIONAL

Relevant legal provisions:

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword: "Inventive step (no)"

Decisions cited:
T 0641/00

Catchword: -
Case Number: T 1108/06 - 3.5.01

DECISION
of the Technical Board of Appeal 3.5.01
of 10 March 2009

Appellant: VISA INTERNATIONAL SERVICE ASSOCIATION
900 Metro Center Boulevard
Foster City, CA 94404   (US)

Representative: Finnie, Peter John
Gill Jennings & Every LLP
Broadgate House
7 Eldon Street
London EC2M 7LH   (GB)


Composition of the Board:
Chairman: S. Steinbrener
Members: S. Wibergh
          P. Schmitz
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division to refuse European patent application No. 94931408.2.

II. According to the decision appealed, the subject-matter of all four independent claims was obvious.

III. With the statement setting out the grounds of appeal, dated 7 June 2006, the appellant requested that the decision be set aside and a patent be granted based on claims 1-35 filed with the same letter. These claims were identical with those on which the decision under appeal was taken.

IV. Claim 1 reads:

"A bill pay system (100) wherein a consumer (12) directs a consumer financial institution to pay a biller's (14) bill, comprising:

   a consumer bill pay interface to a consumer financial institution (16) computer equipped to accept a bill pay order (122) from the consumer, said bill pay order including at least an indication of a unique preassigned biller identifier (ID), an amount to be paid, and an indication of a consumer-biller account to be credited, said consumer-biller account being an account maintained by the biller (14) to determine amounts owed to the biller by the consumer (12);

   payment message generation means coupled to said consumer financial institution computer for generating a payment message (124) based on information contained in said bill pay order, said payment message comprising
at least an indication of said unique preassigned biller identifier (ID), said amount to be paid, and said consumer-biller account;

a payment network (102), coupled to said payment message generation means, for transmitting said payment message, said payment network comprising a universal biller reference data file (108) including said unique preassigned biller identifier (ID) and a biller bank identifier for identifying a biller financial institution (18) as a destination for said payment message using said unique preassigned biller identifier (ID) included in said payment message, and for debiting an account of the consumer financial institution according to said amount in said payment message;

payment message accepting means, coupled to said payment network (102) and to the biller financial institution (18) computer at said destination, for accepting said payment message (124) from said payment network and crediting an account (26) of the biller (14) according to said amount in said payment message, said account of the biller being determined using said unique preassigned biller identifier (ID) to identify the account of the biller in a file held at the biller financial institution; and

biller data processing means, coupled to one of said payment network or said payment message accepting means, for processing biller data included in said payment message (124) and providing said data in a form used by said biller to update said consumer-biller account to reflect a credit of said payment message amount."

V. In a communication, the Board noted that independent claim 21 was directed to a method of paying bills and
referred to very few clearly technical means. The invention's main characteristic seemed to be that the biller's bank account number was not used during the processing leading up to the biller's bank. Instead, a "unique preassigned biller identifier" was employed before finally being replaced by the account number. But what actually happened was just that one number was substituted for another. This was in itself not a technical feature but a mere change of account indications. One purpose of the replacement was to keep the account number secret from the public. The examining division called this a "business or administrative decision of not entrusting the consumer with bank data of the biller", and the Board tended to agree. Similarly, the effect of the feature "said account of the biller being determined using said unique preassigned biller identifier (ID) to identify the account of the biller in a file held at the biller financial institution" in claims 1 and 21 was mainly on the consumer, to whom the account number was not disclosed. Its effect on the computer was that the desired records in the file could be found. Although this might be a technical aspect, it was as such trivial (and not described).

VI. Oral proceedings were held on 10 March 2009. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims filed with the statement setting out the grounds of appeal dated 7 June 2006.

VII. At the end of the oral proceedings the Board announced its decision.
Reasons for the Decision

1. The invention (see pages 21-25 of the description) relates to electronic bill payment systems which allow a consumer to direct his bank to pay amounts owed to a biller (eg a merchant). According to the invention, the biller first sends the consumer a bill indicating the amount due, the consumer's account number (C-B) with the biller, and the "biller reference number" (BRN). The BRN is a unique preassigned number identifying the biller to the payment network. The consumer then sends a bill payment order to his bank, instructing it to debit his account by the proper amount and forward the funds to a payment network together with the BRN and the C-B account number. The bank submits a payment message to the payment network, which debits the bank and credits the biller's bank by the same amount. The biller's bank is identified by looking up the biller's BRN in a file. The biller's bank then uses the BRN to look up the biller's account number in a privately held file. Since this account number is not known outside the bank, it is less likely that someone other than the biller could present a withdrawal transaction to that account.

2. The subject-matter of claim 1 is a "bill pay system". It is largely defined in terms of a method for paying bills (which is the subject-matter of independent claim 21). Since a money transfer is above all a commercial transaction, ie non-technical, it is appropriate to start the examination by analysing claim 1 in order to determine in how far its features merely reflect business principles.
3. Claim 1 comprises the following features (followed by the Board's comments):

- a consumer bill pay interface to a consumer financial institution computer equipped to accept a bill pay order from a consumer, said bill pay order including at least an indication of a unique preassigned biller identifier, an amount to be paid, and an indication of a consumer-biller account to be credited, said consumer-biller account being an account maintained by the biller to determine amounts owed to the biller by the consumer. A computer interface for receiving data is a technical means. A bill pay order may be technical when regarded as a transmission over a data channel (e.g., e-mail), but the indications of an amount to be paid and a consumer-biller account are in themselves merely presentations of information. The "unique preassigned biller identifier", which is also a data item, will be discussed at point 5 below.

- payment message generation means coupled to said consumer financial institution computer for generating a payment message based on information contained in said bill pay order, said payment message comprising at least an indication of said unique preassigned biller identifier, said amount to be paid, and said consumer-biller account. The generation means, coupled to a computer, is technical, whereas the data indications are presentations of information.

- a payment network, coupled to said payment message generation means, for transmitting said payment message.
The payment network comprises a computer network, which is technical.

- said payment network comprising a universal biller reference data file including said unique preassigned biller identifier and a biller bank identifier for identifying a biller financial institution as a destination for said payment message using said unique preassigned biller identifier included in said payment message, and for debiting an account of the consumer financial institution according to said amount in said payment message. The data file will be a computer memory and is thus technical. The unique preassigned biller identifier and the biller bank identifier are just data items, but the (automatic) retrieval of the latter with the aid of the former in a data file arguably has technical character. Debiting an account is a purely commercial operation.

- payment message accepting means, coupled to said payment network and to the biller financial institution computer at said destination, for accepting said payment message from said payment network and crediting an account of the biller according to said amount in said payment message. The accepting means coupled to a computer and arranged to receive data, are technical. Crediting an account is a commercial operation.

- said account of the biller being determined using said unique preassigned biller identifier to identify the account of the biller in a file held at the biller financial institution. Again, the automatic retrieval of an account number might have technical aspects.
- biller data processing means, coupled to one of said payment network or said payment message accepting means, for processing biller data included in said payment message and providing said data in a form used by said biller to update said consumer-biller account to reflect a credit of said payment message amount. Formatting data could be technical if adapted to special hardware requirements, but this does not appear to be the case in the present context. Updating an account is a commercial operation.

4. The claim thus contains a number of features which are purely of a commercial nature:

- determining the amount owed,
- debiting and crediting bank accounts, and
- updating the consumer-biller account to reflect a credit.

Other features are presentations of information:

- the indications of the amount to be paid and the consumer-biller account in the bill pay order and in the payment message.

These features are non-technical in the sense that they do not contribute to the technical character of the invention. Therefore they cannot contribute to an inventive step (cf T 641/00 "Two identities/COMVIK", OJ EPO 2003,352).

5. Although the "unique predetermined biller identifier" is also just a data item, its use as a key for (automatically) identifying the biller's financial
institution in a data file could be regarded as having technical aspects. However, since this identification - the details of which are not included in the claim - may simply consist of looking up data in a table (cf fig.5), the feature was obvious even if it were technical. The same applies to its use for determining the biller's bank account.

As to this latter use, the appellant, drawing a parallel with encryption systems, has argued that the security offered by using the unique preassigned biller identifier instead of the biller's account number was itself a technical aspect. The Board, however, cannot agree, at least not fully. Security as such is not a technical notion. Any agreed code or pass word could be used for identifying a bank account, without necessarily involving any technical means at all. The use of the unique preassigned biller identifier as a secure pass word is therefore regarded as a feature of the commercial method underlying the invention and thus cannot, whether original or not, contribute to an inventive step. As to the encryption analogy, the Board would like to point out that it has not excluded that the use of the unique preassigned biller identifier as a key for automatically identifying the biller's bank and account number contained in a data base has a technical aspect.

6. This leaves the following technical features in the claim:

- the consumer bill pay interface,
- the payment message generation means,
- the payment (computer) network used for transmitting data,
- the universal biller reference data file, and
- the payment message accepting means.

These means ensure that the claimed subject-matter is an invention within the meaning of Article 52(1) EPC. However, they are conventional and used for their intended purposes of transmitting, receiving and storing data.

7. The appellant has argued that if claim features are regarded in isolation there is a risk of not recognizing a technical effect consisting of a (synergistic) addition of "semi-technical" effects. Even if this was true, the Board cannot see that any such combinatory effect exists in the present case. Due to the system's non-technical purpose of paying bills there is no overall technical effect. Nor are any intermediate technical effects apparent since the invention is largely limited to processing information.

8. The appellant has furthermore argued that data which are essential to the identification of particular entities within the system, or the routing of data within the system are fundamental to the operation of the system and as such clearly technical. The Board, however, doubts that routing of data and identification of entities always have technical character. What may be technical is rather the means for achieving such tasks. Claim 1 specifies that messages and data are transmitted to various financial institutions, but the invention is not really concerned with the particular technical means involved. Indeed, the description
mentions that "a message could be interchangeably embodied in a postal mail paper form, an e-mail message, a telephone voice response session, etc" (p.38). Furthermore, as already mentioned, the identifications are performed using data files in a non-specified manner.

9. Finally, the appellant acknowledges that the skilled person in the present case is a computer scientist or programmer. A person having these skills is not expected to know anything about how bills and pay orders are routed between financial institutions, or whether or not bank account numbers should be confidential. The realistic situation is presumably that the programmer would be informed by a banker of the principles of a new method of paying bills - what financial institutions are to be involved and what information items need to be transmitted - and asked to implement the method in a suitable way (cf the "Comvik" approach). This implementation is the technical problem. Starting out from a basic computer network, he would merely have to connect it to the financial institutions and add a data base for storing and looking up data. These measures were obvious.

10. It follows that the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC 1973).
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: 

The Chairman:

T. Buschek

S. Steinbrener