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Datasheet for the decision of 14 September 2010

Case Number: T 1363/07 - 3.4.03

Application Number: 00988470.1

Publication Number: 1222640

IPC: G07F 7/08

Language of the proceedings: EN

Title of invention:
System for rapidly dispensing and adding value to fare cards

Patentee:
Cubic Corporation

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 123(2)
RPBA Art. 13(1), 15(3)

Relevant legal provisions (EPC 1973):
EPC Art. 56, 83, 84, 113(1)

Keyword:
"Inventive step (no) - main request"
"Added subject-matter (yes) - auxiliary request"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1363/07 - 3.4.03

D E C I S I O N
of the Technical Board of Appeal 3.4.03
of 14 September 2010

Appellant: Cubic Corporation
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Representative: Gray, James
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 21 March 2007 refusing European patent application No. 00988470.1 pursuant to Article 97(1) EPC 1973.**

Composition of the Board:

Chairman: G. Eliasson
Members: R. Q. Bekkering
T. Bokor

Summary of Facts and Submissions

I. This is an appeal against the refusal of application 00 988 470 for lack of novelty, Article 54(1) and (2) EPC, for lack of an inventive step, Article 56 EPC, over

D1: US 5 352 876 A,
D2: GB 2 267 626 A, and
D3: EP 0 380 377 A

and for lack of unity, Article 82 EPC.

II. Oral proceedings were held in the absence of the appellant applicant, of which the board had been informed in advance.

III. The appellant requested in writing that the decision under appeal be set aside and a patent granted on the basis of the following:

Main request: claims 1 to 7 filed with the statement setting out the grounds of appeal, or

Auxiliary request: claims 1 to 7 filed with letter dated 13 August 2010.

IV. Claim 1 of the main request reads as follows:

"*An add value terminal (2) for rapidly dispensing and adding value to fare cards, the add value terminal (2) having a control and memory assembly (52) for controlling a front panel interface (36) and for communicating with a controller through serial*

communication links, the front panel interface (36) including a patron display (18) for displaying information and instructions to a patron, a plurality of selection buttons (6) adjacent the patron display (18) for selecting the displayed options, a magnetic stripe card reader (78) for accepting magnetic stripe far [sic] cards, the add value terminal (2) further having a debit/credit card reader (58), wherein the add value terminal (2) is a cashless terminal such that the value is added to at least one of the magnetic stripe fare cards and the contactless fare cards utilizing credit and debit accounts through use of the debit/credit card reader (58) and the add value terminal (2) having a pin pad adjacent the debit/credit card reader (58) for entering debit/credit card pin numbers, characterised in that the controller is a transit station controller (226), the add value terminal (2) is in communication with the transit station controller (226) for the authorisation of credit and debit card transactions, and the terminal (2) includes a contactless smart card reader (28) for reading from/writing to contactless fare cards."

Claim 1 of the auxiliary request corresponds to that of the main request with the following characterising portion (additional features with respect to the main request highlighted by the board):

"*characterised in that the controller is a transit station controller (226), the add value terminal (2) is in communication with the transit station controller (226) for the authorisation of credit and debit card transactions* ***and further for the transmission of fare validation tables and other relevant parameters,***

minimum/maximum purchase values, and negative lists, *and the terminal (2) includes a contactless smart card reader (28) for reading from/writing to contactless fare cards.*"

The main request and the auxiliary request furthermore include independent claims 4 and 5 directed to a method of adding value to fare cards and a transit system network, respectively.

V. The appellant applicant argued as follows:

The add value terminal of the invention was provided with a display to guide patrons through a transaction in a similar manner to the vending machine of D1. However, it further functioned to convey information to the patron regarding commodity being purchased, i.e. travel on a transit network, thereby providing additional functionality. Furthermore, D1 did not provide a controller intermediate the prepaid vending machine and either the processing apparatus or credit centre which was able to supply the prepaid vending machine with information relating to the commodity or commodities that the user may choose to subsequently purchase either at an automatic vending machine or store. Furthermore, by feeding everything through a single system, the transit authority could better monitor transactions within the system for fraud. Accordingly, independent claims 1, 4 and 5 of the main request were both novel and inventive.

The amendments according to the auxiliary request more clearly described the function of the transit station controller and furthermore recited the functionality

which, as discussed for the main request, was not present in either documents Dl or D3. Accordingly, the claims of the auxiliary request were both novel and inventive and therefore allowable.

Reasons for the Decision

1. The appeal is admissible.

2. *Main request*

2.1 *Novelty*

2.1.1 *Document D1*

Document D1 discloses a terminal for adding value to a card. In particular, funds are withdrawn from a credit card account and added to the funds available on the card. The card, eg a company ID card issued for the identification of individuals within a company, with the funds thereon may be used to purchase items at stores or from vending machines. The terminal, which features card readers for both the ID card and a credit card, allows funds to be added to the ID card by reading the credit card data, requiring the customer to input a secret code number using a keyboard/touch panel, communicating with the credit center for performing the credit transaction and magnetically recording the credit amount on the magnetic stripe of the ID card (cf column 2, line 37 to column 4, line 10 and figures 1 to 3).

In particular, document D1 discloses, using the terminology of claim 1 according to the appellant's main request, an add value terminal (10) for rapidly adding value to cards, the add value terminal having a control and memory assembly (18,19) for controlling a front panel interface and for communicating with a controller (27) through serial communication links (public telephone), the front panel interface including a patron display (16) for displaying information and instructions to a patron, a plurality of selection buttons (keyboard/touch panel) adjacent the patron display for selecting the displayed options, a magnetic stripe card reader (15) for accepting magnetic stripe cards, the add value terminal further having a credit card reader (15), wherein the add value terminal is a cashless terminal such that the value is added to the magnetic stripe cards utilizing credit accounts through use of the credit card reader and the add value terminal (2) having a pin pad adjacent the credit card reader for entering credit card pin numbers.

Furthermore, in D1 the add value terminal is in communication with the credit center (13) for the authorisation of credit card transactions, which constitutes a "*controller*" within the meaning of claim 1.

As far as the qualification that the controller is a transit station controller provides a clear and meaningful limitation and, thus, a distinction over the controller of D1, this feature is not disclosed in D1. Furthermore, and to a certain extent related to foregoing, D1 does not disclose that the cards are fare cards for use in transit systems.

Furthermore, D1 does not disclose that the terminal includes a contactless smart card reader for reading from/writing to contactless (fare) cards.

Accordingly, the subject-matter of claim 1 of the main request is new with respect to document D1 (Article 54(1) and (2) EPC 1973).

2.1.2 *Document D2*

Document D2 discloses a fare card (ticket) for use in a transit system. The ticket includes a memory, processor and a radio transmitter and receiver which enables the ticket to communicate with a target apparatus in any orientation. Passengers carrying the ticket can purchase credit at an appropriate station and this credit is stored in the memory. When using the ticket, information is transmitted between the ticket and a ticket apparatus to enable the fare to be debited (cf abstract).

Document D2, thus, discloses a contactless smart card for use as a fare card within the meaning of claim 1. However, no further details are provided in D2 on how credit can be purchased.

Accordingly, the subject-matter of claim 1 of the main request is also new with respect to document D2 (Article 54(1) and (2) EPC 1973).

2.1.3 Novelty is also provided with respect to document D3, disclosing a transit fare system using pre-paid electronic fare cards comprising a network including

terminals for loading funds onto the card using bank transfers (cf. abstract).

2.2 *Inventive step*

2.2.1 The closest prior art is considered to be provided by document D1.

In view of the above distinguishing features of claim 1 over D1 relating to the transit station controller and the cards being fare card, the objective problem to be solved relative to D1 is to extend the field of application of the teaching of D1 beyond company internal ID cards and typical purchases within the company's premises (vending machines, canteens/restaurants etc.).

The above distinguishing features of claim 1 over D1 relating to the contactless smart card reader on the other hand has the effect of improving the reliability of the system with respect to magnetic stripe card readers, generally known to be susceptible to faults. Accordingly, the objective problem to be solved relative to D1 in this respect is to increase the reliability of the system.

As distinct problems are solved, the above distinguishing features can be dealt with separately.

The formulation of both above problems to be solved lacks inventive merit as the skilled person in the relevant technical field of electronic payment systems is on the one hand aware of the general need for effective ways of loading funds onto pre-paid cards

everywhere where such cards are used and on the other hand constantly concerned with the reliability of the system.

Moreover, it is already known from document D2 to use pre-paid cards for payment of transit fares. As discussed above, D2 indicates that funds are loaded onto the cards at appropriate stations. It would be obvious to the person skilled in the art to apply the teaching of document D1, offering an effective way of loading funds to such a card, to the fare cards known from D2.

Furthermore, it would be obvious to locate the terminal in a transit station. As far as the means in the credit center (13) of D1 for settling the credit card transaction *per se* do not already qualify as a transit station controller as it controls the transactions at the terminal located in a transit station, it would be obvious to a skilled person to provide an additional controller as appropriate, eg at nodes of a more complex and wide ranging network. In particular, it would readily occur to the skilled person to provide such a controller at a transit station equipped with a plurality of such terminals, as would typically be the case. Reference is made in this respect also to document D3, showing that it is generally known in a network of fare and add value terminals for a transit system to connect them to controllers controlling selected parts of the network.

As far as the above second partial problem is concerned, it is known from D2, in order to improve the reliability of the system with respect to one using

magnetic stripe cards, to use contactless smart cards (cf page 3, line 16 t page 4, line 2; page 15, lines 10 to 13). Accordingly, it would be obvious for the person skilled in the art to provide the terminals of D1 with a contactless smart card reader for reading from/writing to contactless fare cards, as per claim 1.

2.2.2 The appellant argued that the prepaid vending machine of Dl only displayed and printed information relating to the application of a monetary value to the ID card. In the invention, the add value terminal was not limited to this functionality. While the add value terminal was provided with a display to guide patrons through a transaction in a similar manner to the vending machine of Dl, the add value terminal further functioned to convey information to the patron regarding commodity being purchased, i.e. travel on a transit network.

Furthermore, Dl did not provide a controller intermediate the prepaid vending machine and either the processing apparatus or credit centre which was able to supply the prepaid vending machine with information relating to the commodity or commodities that the user may choose to subsequently purchase either at an automatic vending machine or store.

According to the invention, by feeding everything through a single system, the transit authority could better monitor transactions within the system for fraud. The application disclosed the of types information transmitted between the terminal and controllers, such as status messages, audit registers, fare card update transaction data, fare validation tables and other

relevant parameters, minimum/maximum purchase values, and "negative lists" (or blacklists). These sorts of transmitted information could certainly lend themselves to tracking and preventing fraud.

2.2.3 None of the above details and functionalities of the controller are, however, specified in claim 1. Claim 1 in fact merely defines the provision of a transit station controller, leaving it open what information is communicated through the controller.

Accordingly, the subject-matter of claim 1 of the main request lacks an inventive step (Article 56 EPC 1973).

The same applies in substance to the subject-matter of independent claims 4 and 5.

The appellant's main request is, therefore, not allowable.

3. *Auxiliary request*

3.1 The above appellant's auxiliary request for the grant of a patent on the basis of amended claims was filed after oral proceedings before the board were arranged.

Obviously, any such request entails *inter alia* an assessment by the board as to the conformity of the request with procedural requirements, the request being filed after the statement setting out the grounds of appeal have been submitted and thus its admission and consideration being subject to the board's discretion (Article 13(1) RPBA), as well as an assessment as to the conformity of the claimed subject-matter with the

requirements of the EPC, notably clarity, added subject-matter, novelty, and inventive step, as a result of which grounds for a decision adversely affecting the appellant may arise. An appellant submitting such a request should, therefore, expect such grounds to be advanced.

An appellant renouncing to come to oral proceedings before the board to which it was duly summoned must be taken to waive its right to present comments on any such grounds (Article 113(1) EPC 1973).

It is, moreover, noted that a different conclusion, ie that the appellant should be given the opportunity to comment, specifically on his request being held inadmissible or not allowable, would make a continuation of the proceedings in writing necessary and thus oblige the board to delay its decision in the proceedings by reason only of the absence at the oral proceedings of the party, contrary to Article 15(3) RPBA.

In view of the fact that the request was filed in advance of the oral proceedings, constitutes an attempt to overcome the objections raised and is provided with reasons in support thereof, and as the board is satisfied that it is able to deal with the request in substance, it exercises its discretionary powers under Article 13(1) RPBA so as to admit the request into the proceedings.

3.2 Claim 1 of the auxiliary request includes with respect to claim 1 of the main request the further feature that the add value terminal is further in communication with

the transit station controller "*for the transmission of fare validation tables and other relevant parameters, minimum/maximum purchase values, and negative lists*".

According to the appellant, the basis for the amendments is in the application documents as originally filed on page 15, between lines 18 and 25.

However, according to this reference, and no other relevant reference is in fact to be found in the original application documents, "*the out-of-system add value terminal 210 and the in-system add value terminal 238 is designed to communicate to the area controller 200 via station controllers 206,226 within the automatic fare collection network. Information transmitted between the area controller 200 and add value terminals 210,238 includes status messages, audit registers, fare card update transaction data, debit/credit transaction data, fare validation tables and other relevant parameters, minimum/maximum purchase values, and negative lists*".

The above feature as now included in amended claim 1 omits not only the area controller but also the other listed information transmitted between the area controller and the add value terminal specified in the above passage of the description. As it is not directly and unambiguously derivable from the application as originally filed that the omitted features are dispensable for the performance of the invention, claim 1 as amended introduces undisclosed subject-matter consisting of a combination of features intermediate between the broader subject-matter of claim 1 as originally filed and the more detailed

embodiment disclosed in the description from which the above referenced paragraph forms part. The amendments, thus, constitute an inadmissible so called "intermediate generalisation", which introduces subject-matter extending beyond the content of the application as originally filed, contrary to the requirements of Article 123(2) EPC.

Moreover, it remains unclear from claim 1, and in fact from the application as a whole, what exactly the "*fare validation tables and other relevant parameters, minimum/maximum purchase values, and negative lists*" are and the purpose of transmitting these data. The expression "*other relevant parameters*" is moreover generally unclear as the scope of the relevance is unspecified. If anything, the transmission of eg transit fare amounts, if this is what is intended by the "*fare validation tables*", would rather appear to be applicable to equipment for collecting the fare (token booth/ turnstile equipment) which, however, is separate from the add value terminal as can be seen from figure 3 of the application, and at any rate nowhere defined in claim 1.

Accordingly, claim 1 as amended lacks clarity, Article 84 EPC 1973, and in fact on this point the application as a whole fails to disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, contrary to Article 83 EPC 1973.

3.3 The appellant argued that the description (page 3, lines 33 to 35) indicated that the terminal displayed the current period and card expiration dates, the

remaining value and the number of rides remaining. As the number of rides remaining on the card depended upon the cost of an individual ride, should this cost change, the add value terminal would need to be updated accordingly. This information relating to the purchased commodity was supplied to the add value terminal via the station controller as indicated in the passage of the description referred to above.

3.4 In the board's opinion, however, the above conclusions drawn by the appellant are not immediately evident from the application as originally filed. As indicated above, the application does not specify the information content of the "*fare validation tables*" or their purpose, neither is it immediately evident how, under the assumption that these tables would contain various applicable fare amounts, the number of rides remaining on the card would be computable in a straightforward manner. Accordingly, the above is not considered to be defined by or derivable from claim 1 or indeed the application as a whole and, therefore, cannot overcome the clarity and sufficiency of disclosure objections above or support the novelty of and presence of an inventive step in the subject-matter of claim 1, as argued by the appellant.

3.5 Accordingly, the auxiliary request is not allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

Registrar	Chair
S. Sánchez Chiquero	G. Eliasson