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**Datasheet for the decision
of 29 September 2011**

Case Number: T 1030/08 - 3.4.01

Application Number: 01938914.7

Publication Number: 1290623

IPC: G06K 9/00

Language of the proceedings: EN

Title of invention:

A teller machine for the infreed and outfeed of banknotes

Applicant:

Nybohov Development AB

Opponent:

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Headword:

-

Relevant legal provisions:

-

Relevant legal provisions (EPC 1973):

EPC Art. 56

Keyword:

"Inventive step (no)"

Decisions cited:

-

Catchword:

-



Case Number: T 1030/08 - 3.4.01

D E C I S I O N
of the Technical Board of Appeal 3.4.01
of 29 September 2011

Appellant: Nybohov Development AB
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 15 January 2008
refusing European patent application
No. 01938914.7 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: B. Schachenmann
Members: P. Fontenay
F. Neumann

Summary of Facts and Submissions

- I. European patent application No. 01 938 914.7 was filed as a PCT application on 7 June 2001 claiming a priority date of 16 June 2000. It was published under No. WO-A-01/99041.

The appeal lies from the decision of the examining division to refuse the application because the subject-matter of claim 1 of the sole request on file was not inventive in the sense of Article 56 EPC 1973 considering the teaching of document WO-A-99/27488 (D1). The decision was pronounced during the oral proceedings before the examining division and later dispatched by post on 15 January 2008.

- II. The appellant (applicant) lodged an appeal against this decision by notice received at the EPO on 11 March 2008. The prescribed appeal fee was paid on the same day. The statement setting out the grounds of appeal was filed on 15 May 2008.

The appellant requested that a patent be granted on the basis of a set of amended claims 1 to 3 according to a main request or, alternatively, on the basis of a set of claims 1 and 2 according to an auxiliary request, both requests being filed with the statement of grounds.

The main request consists thus of following application documents:

claims 1-3, as filed on 15 May 2008;
description pages 1-4, as published under the PCT;

drawing sheet 1/1, as published under the PCT.

The auxiliary request differs from the main request in that claims 1 and 2 have been combined and claim 3 accordingly renumbered in dependent claim 2.

III. At the appellant's request, oral proceedings were duly arranged.

On 1 August 2011, in preparation of the oral proceedings, the Board issued a communication pursuant to Article 15(1) Rules of Procedure of the Boards of Appeal (RPBA), expressing its provisional opinion with regard to the requests on file.

A first issue concerned the introduction in claim 1 of the main request of the feature regarding the check by the superordinate unit whether a banknote for which a decision on destruction had been taken, really should be destroyed. It was observed that this feature had been selected from a combination of functional features and thus constituted an intermediate generalisation of the original disclosure, the allowability of which was questionable under Article 123(2) EPC.

The Board further acknowledged that the problem solved by the claimed invention and its solution were of a technical nature. However, according to their provisional opinion, the teller machine as claimed in claim 1 of both requests derived in a straightforward manner from document D1. The analysis of the Board relied on a one-way scenario elaborated on the basis of the teaching provided in document D1 and the need for the superordinate unit to interfere in the destruction

process, while simultaneously guaranteeing the security level required for the destruction of banknotes.

IV. The appellant did not react to the provisional assessment of the case made by the Board and merely indicated, in a facsimile dated 25 August 2011, that it would not be represented during the oral proceedings which thus took place in its absence on 29 September 2011.

V. Claim 1 of the main request reads:

"1. A teller-machine (1) for the infeed and outfeed of banknotes and a superordinate unit that is superordinate to and independent of the teller machine (1) and adapted to communicate with said teller machine, said teller machine includes detectors (11, 12, 13) for checking the quality, denomination and validity of the banknotes fed into the machine, the detector (13) for carrying out the validity checks is adapted to carry out on each banknote deposited a check with respect to a first number of validity criteria (131) and on a second number of validity criteria (132), wherein said second number of validity criteria (132) are included in the teller machine in a materialised and detector-available form as a closed and sealed unit (132), the teller machine (1) includes downstream of the detectors (11, 12, 13) a destruction unit (14) adapted to destroy banknotes that have been classed as genuine by the detector (13) for validity checks and that also have been classed as low quality banknotes by the detector (11) for quality checks, characterised in that the destruction does not take place until an acceptance signal arrives from said

superordinate unit (via 141), wherein the acceptance signal is an indication that the superordinate unit already has received information regarding denomination, serial numbers and/or quantities of the banknote to be destroyed from the teller-machine, has itself checked whether the banknote for which a decision on destruction has been taken, really shall be destructed, and has accepted destruction of the banknote to be destroyed."

Claims 2 and 3 of the main request depend on claim 1.

Claim 1 of the auxiliary request results from a combination of claims 1 and 2 of the main request and reads (with emphasis on the differences with claim 1 of the main request added in bold type by the Board):

"1. A teller-machine (1) for the infeed and outfeed of banknotes and a superordinate unit that is superordinate to and independent of the teller machine (1) and adapted to communicate with said teller machine, said teller machine includes detectors (11, 12, 13) for checking the quality, denomination and validity of the banknotes fed into the machine, the detector (13) for carrying out the validity checks is adapted to carry out on each banknote deposited a check with respect to a first number of validity criteria (131) and on a second number of validity criteria (132), wherein said second number of validity criteria (132) are included in the teller machine in a materialised and detector-available form as a closed and sealed unit (132), the teller machine (1) includes downstream of the detectors (11, 12, 13) a destruction unit (14) adapted to destroy banknotes that have been

classed as genuine by the detector (13) for validity checks and that also have been classed as low quality banknotes by the detector (11) for quality checks, characterised in that the destruction does not take place until an acceptance signal arrives from said superordinate unit (via 141), wherein the acceptance signal is an indication that the superordinate unit already has received information regarding denomination, serial numbers and/or quantities of the banknote to be destroyed from the teller-machine, has itself checked whether the banknote for which a decision on destruction has been taken, really shall be destroyed, and has accepted destruction of the banknotes to be destroyed, **the superordinate unit also checks whether or not the decision has been put into effect, i.e. that destruction has taken place or has not taken place, and that the banknote instead is rejected for examination.**"

Claim 2 of the auxiliary request depends on claim 1.

- VI. For the appellant's submissions reference is made to the reasons of present decision.
- VII. In this decision reference is made to the provisions of the EPC 2000, which entered into force as of 13 December 2007, unless the former provisions of the EPC 1973 still apply to pending applications, in which case the evocation of the Article or Rule is followed by the indication "1973".

Reasons for the Decision

1. The notice of appeal and the corresponding statement of grounds comply with the requirements of Articles 106 to 108 EPC and Rule 99 EPC. The appeal is, thus, admissible.

2. Main Request - Inventive step
 - 2.1 Document D1 discloses a teller machine for the infeed and outfeed of banknotes and a superordinate machine as recited in the preamble of claim 1 of the main request. More specifically, document D1 discloses a teller machine and a superordinate unit that is superordinate to and independent of the teller machine and adapted to communicate with it (cf. D1, page 5, lines 3-11; page 11, lines 1-3, 14-16). The teller machine of D1 includes detectors for checking the quality, denomination and validity of the banknotes fed into the machine (cf. D1, page 7, lines 4-15; page 8, lines 9-22). Moreover, the detector for carrying out the validity check disclosed in document D1 is adapted to carry out on each banknote deposited a check with respect to a first number of validity criteria and on a second number of validity criteria, wherein said second number of validity criteria are included in the teller machine in a materialised and detector-available form as a closed and sealed unit (cf. D1, page 8, lines 11-14; page 9, lines 12-16, claims 6, 15). The teller machine also includes downstream of the detectors a destruction unit adapted to destroy banknotes that have been classed as genuine by the detector for validity checks and that also have been classed as low quality

banknotes for quality checks (cf. D1, page 8, line 14 - page 9, line 1; page 9, lines 22-24).

The Board thus concurs with the analysis of D1 made by both the examining division and the appellant. The claimed subject-matter appears thus to differ from this known system, consisting of the association of a teller machine and superordinate unit, by the characterising features of claim 1.

The relevant passage of the application (cf. page 3, 2nd paragraph of the application as published) does not provide any additional details as to the actual processes taking place in the superordinate unit before issuing the acceptance signal. It is namely merely specified therein that *"This acceptance means that the National Bank has already received information (denomination, serial numbers, quantities) concerning banknotes intended for destruction"* and that *"The superordinate unit thus itself checks whether a banknote for which a decision on destruction [sic] has been taken, really shall be destroyed"*, as presently recited in the characterising portion of claim 1.

The distinguishing features of independent claim 1 relating to the acceptance signal thus permit the superordinate unit to track and record the banknotes to be destroyed and to carry out additional checks on the basis of the transmitted information before destruction is eventually performed. These effects have to be appreciated in the general context of the present invention and directly relate to its object as defined in the sentence bridging pages 1 and 2 in the published application according to which: *"One object of the*

present invention is to organise decentralised destruction of principally used banknotes while under the supervision by the National Bank in secure and economically favourable forms".

The problem solved by the claimed invention may thus be defined as to adapt the system disclosed in document D1 so as to guarantee supervision by the superordinate unit (the National Bank) of the operations carried out at the local level (teller machine). It is stressed, in this respect, that although the necessity for the superordinate unit (National Bank) to retain the responsibility for the destruction of the notes results from essentially legal considerations, it does not as such prejudice the technical nature of the problem to be solved, but merely defines its context.

In order to guarantee that no operation regarding the banknotes, and in particular, that no destruction of a banknote is carried out without the National Bank being informed and endorsing this decision, a protocol must be defined between the local teller machine and the central bank ensuring that the decision to destroy a banknote has been, at least implicitly, approved by the National Bank. The transmission of all the data collected in unit 300 of the local secured area 160 is foreseen in document D1. In particular, the information such as quantity, denomination or individual serial number, collected by the receiving point 110, the commercial destruction unit 200 and the output point 120 located within said secured area 160 are accumulated in a data and security control functions unit 300 and then transmitted in real-time to a central bank (cf. D1, page 10, lines 17; page 11, lines 1-3).

Therefore, it would have been straightforward for the skilled person when seeking a solution to the problem defined above, to adapt the system of D1 so as to collect and transmit all the data actually required for the type of decisions to be taken, and in particular all the data necessary to decide on the destruction or not of particular notes. The central bank or national bank would therefore have all of this data at its disposal and would be in a position to process this data itself in real-time in order to confirm the decision of the local teller machine or to take an overriding decision concerning the destruction of the notes, if necessary.

Although two solutions regarding the manner in which the superordinate unit may signal its endorsement of the decision may have been envisaged, the Board holds that the issuance of an acceptance signal by the superordinate unit is the only one which would have been seriously considered by the skilled person. While it is indeed acknowledged that the alternative solution relying on the transmission by the superordinate unit to the destruction unit of a control signal in order to interrupt the destruction process, if necessary, would also have constituted an effective measure, it is stressed that this sole measure would have not been sufficient to guarantee the required security level expected for such tasks. Under such conditions, the destruction process would, namely, have been continued in case the transmission of the control signal would have failed. In order to remedy this shortcoming, the skilled person would have therefore made the destruction process dependent on the reception of an

acceptance signal from the superordinate unit rather than on the absence of an interruption signal.

- 2.2 The Board rejects the appellant's view according to which the general teaching of D1 would guide the skilled person away from making a tighter direct control of the destruction process taking place in the local teller machine. In the statement of grounds of appeal, the appellant more particularly emphasised that although the local destruction process was monitored/supervised by the monitoring function in D1, no interference in the destruction process was suggested: the role of the monitoring unit was limited to the monitoring and supervision of the processes.

Document D1 puts particular emphasis on the fact that the system disclosed therein eliminates the need to duplicate currency processing efforts and the need to transport unfit notes from a commercial facility to a central bank (cf. D1, page 3, lines 2-8). The system described in D1 thus aims to decentralise the destruction process and achieves this aim by re-locating certain tasks which are traditionally performed by the central bank (e.g. the proprietary validity checks and the destruction itself) to the local commercial destruction unit. There is no indication to be found in D1, neither explicit nor implicit, that the central bank should be prohibited in any way from interfering in the process or indeed from retaining ultimate control over the system. On the contrary, the fact that the data confirming the processing of the banknotes at the various stages in secure unit 150 is transmitted to the central bank in real-time constitutes a clear indication that the

superordinate unit is equipped with the necessary data to allow it to react spontaneously, if necessary. If it were only required to keep the superordinate unit up-to-date on a real-time basis with regard to which banknotes have been destroyed or not, then this requirement would have been satisfied by the sole transfer of the data collected by the output point 120 or the commercial destruction unit 200. Instead, the real-time transfer of all data at essential stages of the decision and destruction process implies that the system of D1 intends a certain degree of control to be retained by the central bank.

2.3 For these reasons, the subject-matter of claim 1 of the main request does not involve an inventive step in the sense of Article 56 EPC 1973.

3. Auxiliary request - Inventive step

Claim 1 according to the auxiliary request includes the additional limitation according to which "*the superordinate unit also checks whether or not the decision has been put into effect, i.e. that destruction has taken place or has not taken place, and that the banknote instead is rejected for examination*". The additional feature introduced in claim 1 permits the verification that the implementation of the decision to destruct a banknote has indeed been satisfactorily carried out.

In the Board's judgement it would have been obvious for the skilled person to compare the data provided by the various subunits of the teller machine in order to identify any possible malfunction regarding the

processing of the banknotes. Moreover, the Board cannot identify any inventive step in the performance of this comparison of the data at the level of the central bank, whether as a unique check or as verification of a former check carried out by unit 300 of the teller machine. This is all the more true since in D1 the data actually required for these checks is available not only to unit 300 within the teller machine, but also to the central bank, thus hinting at a verification at the higher level of the system.

For these reasons, the subject-matter of claim 1 of the auxiliary request is considered to be obvious in view of the prior art and thus does not meet the requirements of Article 56 EPC 1973.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

R. Schumacher

B. Schachenmann