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**Datasheet for the decision
of 9 September 2008**

Case Number: T 0796/06 - 3.4.03

Application Number: 00127526.2

Publication Number: 1111551

IPC: G07D 5/00

Language of the proceedings: EN

Title of invention:
Coin discriminating apparatus

Applicant:
LAUREL BANK MACHINES CO., LTD.

Opponent:
-

Headword:
-

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56, 83, 111(2)

Keyword:
"Remittal (yes)"

Decisions cited:
-

Catchword:
-



Case Number: T 0796/06 - 3.4.03

D E C I S I O N
of the Technical Board of Appeal 3.4.03
of 9 September 2008

Appellant:

LAUREL BANK MACHINES CO., LTD.
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Representative:

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Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 12 January 2006
refusing European application No. 00127526.2
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: E. Wolff
Members: G. Eliasson
J. Van Moer

Summary of Facts and Submissions

I. This is an appeal against the refusal of European patent application 00 127 526 for lack of inventive step over the prior art documents

D1: EP 0 683 473 A;

D4: EP 0 883 092 A; and

D5: WO 99 44 176 A.

II. At the oral proceedings before the board, the appellant applicant requested that the decision under appeal be set aside and a patent be granted on the basis of the application documents sent with the statement of the grounds of appeal (main request), or in the alternative, that the case be remitted to the department of the first instance for further prosecution (auxiliary request).

III. Claim 1 reads as follows:

"1. A coin discriminating apparatus comprising

magnetic sensor means (12) for detecting magnetic properties of a coin (1) being transported and producing magnetic data of the coin (1),

optical sensor means (22) for producing optical data of the coin (1),

reference optical data storing means (51) for storing reference optical data of an obverse surface and a reverse surface of coins (1) of each denomination,

reference magnetic data storing means (50) for storing reference magnetic data of an obverse surface and a reverse surface of coins (1) of each denomination to be discriminated,

first coin discriminating means (61) for comparing optical data of the coin produced by the optical sensor means (22) with reference optical data of an obverse surface and a reverse surface of coins of each denomination and determining whether or not the coin (1) is acceptable and the denomination of the coin (1),

and second coin discriminating means (62) for reading from the reference magnetic data storing means (50) magnetic reference data selected depending upon whether reference optical data of the obverse surface of a coin (1) of a certain denomination or those of the reverse surface of the coin (1) of the denomination were used when the first coin discriminating means (61) determined the coin (1) to be acceptable and the denomination of the coin (1) based thereon and comparing them with the magnetic data produced by the magnetic sensor means (12), thereby finally discriminating whether or not the coin (1) is acceptable and the denomination of the coin (1)."

Reasons for the Decision

1. The appeal is admissible.

2. *Inventive step*

2.1 Document D1 was considered closest prior art in the decision under appeal and was also cited in the application (see paragraph 0002 citing the corresponding Japanese application). It discloses a coin discriminating apparatus comprising magnetic sensor means 7 and optical sensor means 9 (see Figures 1 and 2; column 4, lines 25 to 43. For each denomination of acceptable coins, the apparatus has reference optical data storing means 38 for storing reference optical data of an obverse and reverse surface of a coin and reference magnetic data storing means 30 for storing reference magnetic data of a coin (Figure 3; column 5, line 54 to column 7, line 13). A first coin discriminating means compares magnetic data of the coin produced by the magnetic sensor means with magnetic reference data (31) and determines whether the coin is acceptable and the denomination of the coin. A second coin discriminating means compares optical data of the coin produced by the optical sensor means with reference optical data (34, 39) of the denomination as determined by the first discriminating means (cf. column 12, lines 35-51; column 15, lines 10-19), thereby finally discriminating whether or not the coin is acceptable and the denomination of the coin.

2.2 The apparatus of claim 1 thus differs from that of document D1 essentially in that (i) the order of optical and magnetic discrimination is reversed; and (ii) magnetic reference data are stored for both faces of coins for each denomination, whereas in document D1 only one set of magnetic reference for each denomination is stored.

- 2.3 According to the application, the claimed apparatus improves the accuracy of discriminating counterfeit coins (see paragraph 0003 of the application as published).
- 2.4 Document D1 mentions that in order to produce accurate optical data from the optical sensor means, it is essential for the optical sensor means to be adjusted according to the reflectivity of the coin, which itself is a property of the material of the coin (column 7, line 57 to column 8, line 35). For this purpose, the result of the first discriminating means identifying the denomination of the coin is used as input for controlling the amount of light detected (column 7, lines 48 to 56). Thus, in the apparatus of document D1, it is essential that the discrimination of the magnetic properties is carried out first so that the denomination of the coin is known before the coin is detected by the optical sensor means 9.
- 2.5 Therefore, it would appear that a skilled person seeking to improve the apparatus of document D1 would not arrive at the apparatus of claim a in an obvious manner, as document D1 clearly teaches against reversing the order of magnetic and optical discrimination. None of the other available prior art documents contains any teaching which would point towards the claimed solution.

3. *Sufficiency of disclosure*

- 3.1 As mentioned above, document D1 was cited in the present application as starting point for the present

application (paragraph 0002). A skilled person wishing to carry out the teaching of a published patent application would as a matter of course consult the prior art cited therein, as this would help them to understand the invention (compare Rule 42(1)(b) EPC). In the present case, the skilled person would learn from document D1 that the solution disclosed in the present application of carrying out coin discrimination based on optical data before the discrimination based on magnetic data would not work, as the optical sensor means would have to be adjusted according to the reflective properties of the coin in order to be able to produce accurate optical data (column 7, line 57 to column 8, line 35). The skilled person would furthermore take note that document D1 and the present application not only have the same applicant, but also that the optical sensor means of the two apparatuses share striking structural similarities (compare eg figure 1 of document D1 with figure 2 of the present application). Yet the present application appears to be completely silent as to how to solve the problem of ensuring that the optical sensor means is able to produce optical data of high quality without knowing the denomination of the coin in advance. The board therefore has serious doubts whether the application discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art as required in Article 83 EPC 1973.

- 3.2 As this objection was raised for the first time in the appeal procedure, the board finds it appropriate to exercise its discretion under Article 111(1) EPC 1973 and remit the case to the department of first instance

for further prosecution in order for the appellant applicant to prepare a response to this objection.

- 3.3 The board points out that its finding on inventive step based on the current circumstances is not to be construed as a final decision in this matter. Thus, if the examining division were to arrive at the conclusion that the application meets the requirements of Article 83 EPC 1973, it would not be barred from reassessing inventive step in the light of that finding.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution.

Registrar

Chair

S. Sánchez Chiquero

E. Wolff