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**Datasheet for the decision  
of 8 January 2013**

**Case Number:** T 1960/11 - 3.4.03

**Application Number:** 05735388.0

**Publication Number:** 1782404

**IPC:** G07F 19/00

**Language of the proceedings:** EN

**Title of invention:**

Apparatus for prevention of reading of magnetic cards

**Applicants:**

Kronik Elektrik Elektronik Ve Bilgisayar  
Sistemleri Sanayi Ticaret Limited Sirketi  
TMD Holding B.V.

**Opponent:**

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**Headword:**

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**Relevant legal provisions:**

EPC Art. 123(2)

**Relevant legal provisions (EPC 1973):**

EPC Art. 56

**Keyword:**

"Amendment (allowed)"

"Inventive step (yes)"

**Decisions cited:**

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**Catchword:**

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Case Number: T 1960/11 - 3.4.03

**D E C I S I O N**  
of the Technical Board of Appeal 3.4.03  
of 8 January 2013

**Appellant:** Kronik Elektrik Elektronik Ve Bilgisayar  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 16 March 2011  
refusing European patent application  
No. 05735388.0 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman:** G. Eliasson  
**Members:** E. Wolff  
T. Bokor

## Summary of Facts and Submissions

- I. This is an appeal from the decision of the examining division to refuse European patent application 05 735 388 for lack of an inventive step.
- II. The examining division based its conclusions on the following two prior art documents:
- D5: EP 1 067 474 A
- D6: XP-002145300 (Unauthorised Card Stripe reading Inhibitor, J. Svigals, IBM Technical Disclosure Bulletin, Vol. 26, No. 6, November 1983)
- III. At oral proceedings before the board, the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the sole request filed during oral proceedings.
- IV. The independent claims 1 and 6 of the sole request as filed at the oral proceedings before the board read as follows:
- "1. *A card reader unit with a card reader device for reading a magnetic card, the card reader device being provided with a card insertion slot (14), the unit further comprising a coil (4, 17) with a ferrite core, wherein the coil (4, 17) is arranged to spread an electromagnetic field, so that another, illegal card reader (16) installed in front of the card insertion slot (14) will not be able to precisely read the data on the magnetic card, characterised in that signals similar to the*

*data on the card are formed around the coil (4, 17)."*

*"6. A method for preventing precise reading of a magnetic card by an illegal card reader installed in front of a card insertion slot (14) of a card reader device, by spreading an electromagnetic field forming signals similar to the data on the card, so that the illegal card reader will not be able to precisely read the data on the magnetic card, wherein the electromagnetic field is spread using a coil (4, 17) with a ferrite core, and wherein the signals similar to the data on the card are formed around the coil (4, 17)."*

V. In support of the request, the appellant argued essentially as follows.

On the one hand, the examining division appeared to accept that the invention had the technical effect that simulated card data signals similar to data signals made it more difficult to distinguish them from normal card data and hence more difficult to be filtered out.

On the other hand, the examining division objected that the word "*similar*" in relation to the generated signals did not sufficiently distinguish the invention from the prior art.

The objection of the examining division was incorrect. The word "*similar*" was the appropriate term to indicate that the disturbing field as generated by the coil merely approximated a data field as read by the card reader device, but did not coincide with it. It was

"similar" signals that achieved the desired technical effect, thereby conferring an inventive step on the claimed invention. Accordingly, the application fully met the requirements of the EPC and was in order to be granted.

### **Reasons for the decision**

1. The appeal is admissible.
2. Amendment (Art. 123(2) EPC)
  - 2.1 The originally filed claims 1 to 8 were not framed in the customary and obligatory form (written opinion of the ISA, "re item VIII, paragraph 4.1). The claims were cast into an acceptable format only at the time of entry into the regional phase before the European Patent Office as designated Office.
  - 2.2 The examining division concluded that there were no objections under Art. 123(2) EPC to the apparatus claims 1 to 5 before it (Section 3 of communication of 23 November 2010 which the decision incorporates by reference and which sets out the conclusions of the examining division in respect of the application). With the exception that the board found the further specification of a ferrite core for the coil to be necessary, the board sees no reasons to disagree with this conclusion.
  - 2.3 The independent method claim, claim 6, first filed during the appeal proceedings, is essentially claim 1 reworded as a method claim.

2.4 Two corrections were made.

2.4.1 The reference numeral used with respect to the coil was corrected so that the claim now refers to "coil (4, 17)". In the description, the coil is variably and inconsistently referred to as "*inductive charge (4)*", (page 3, line 7) or "*coil L1 (4)*" (e.g., page 3, lines 15/16), and "*coil 17*" (page 4, lines 5 and 6).

2.4.2 Figure 4 of the drawings was corrected in respect of the reference numeral assigned to the coil located above the card insertion slot 14. The obviously wrong reference numeral "12" was corrected to "17", a correction which is obvious in the light of the contents of the application as originally filed (see, e.g., page 4, lines 11 and 17, and claims 7 and 8).

2.5 The board is satisfied that the application fulfils the requirements of Article 123(2) EPC. All amendments made, including the present wording of the claims, are clearly and unambiguously derivable from the published application as a whole, there being no indication that the published application differs in content from the application as originally filed.

3. Novelty and inventive step

3.1 The novelty of the claimed invention was never at issue.

3.2 In its communication dated 23 November 2010, the examining division had expressed the view that the distinguishing feature - which it accepted was that

"signals similar to the data on the card are formed around the coil" - could not confer an inventive step on the claimed invention. The division considered the word "similar" not to be limiting enough to ensure that the technical effect argued for by the applicant would be achieved. In the absence of a reply by the applicant, the application was subsequently refused with reference to the communication.

- 3.3 The board finds itself unable to agree with the view taken by the examining division. In the board's view, the skilled person would have no difficulty understanding the meaning and ambit of the word "similar" as used in the claims. Moreover, the meaning of the word "similar" as indicating that the generated signals mimic signals obtained by reading the card would not only be clear to the skilled person but also sufficient to distinguish the invention as presently claimed.
- 3.4 As argued by the appellant, signals produced by a magnetic strip passing a read head would not be identical to simulated signals generated by a coil. The signal pattern of the disturbing field may deviate in terms of amplitude, pulse repetition regularity and/or rise time from the signal pattern of the data signal as recorded by the card reader device.
- 3.5 Yet, to achieve the desired effect, there has to be a similarity between the signals generated and the signals read from the card, otherwise it would be relatively simple and easy to distinguish between signals read and signals generated.

3.6 Thus, in order to achieve what the invention sets out to do, the signals must neither be identical nor differ too much. It is the view of the board that the word "similar" is the proper way to express the required relationship between the two signals.

3.7 Furthermore, the word "similar" in the given context is not only an appropriate term to define the claimed relationship between the signals. As discussed below, it also provides the distinction from the prior art found in documents D5 and D6. This distinction is sufficiently material for an inventive step to be needed in order to arrive at the claimed invention when starting from either of these documents.

3.8 Document D5 provides for several options for preventing an unauthorised reader from reading a magnetic card. In addition to measures proposed such as momentarily interrupting, slowing or even reversing the transport when drawing in or ejecting the card (paragraphs [0010] to [0015]), it is proposed to disable the reading of a magnetic card by a disturbance magnetic field generator (paragraph [0049]). A coil wound around an iron core is attached in the vicinity of the card slot. The coil generates a "*disturbance magnetic field*" to prevent a magnetic head "*illegally attached to the outside of the front panel from reading a magnetic card*". No further information is provided about the field other than that the generated field may be either "*direct or alternating*" (last line of paragraph [0049]).

3.9 Similarly, Document D6 concerns itself with preventing a card being read by an unauthorised reading head. In addition to some mechanical features (paragraph 3,



lines 1-2), document D6 provides for electrical means to impede reading of the card by an unauthorised card reader. In particular, it proposes to *"create a magnetic noise field around the opening of the card reader [...] to reduce the likelihood of being able to read correctly the data content"* (paragraph 4, last sentence).

3.10 Thus, document D5 and document D6 both offer the same overall approach as the present invention, which is to interfere with the reading of the card by the illegal card reader by generating a suitable electric/magnetic disturbance signal at that card reader. The invention as claimed differs from both these prior art disclosures in that the signal generated is more than just a steady or merely alternating magnetic field (document D5) and different from mere noise (document D6). There is certainly no suggestion anywhere in either document that *"signals similar to the data on the card are formed around the coil"* as demanded by independent claims 1 and 6.

4. The board is satisfied that the application complies with the requirements of Article 123(2) EPC. The board is also satisfied that, with respect to the prior art available to the board, the invention as claimed in claims 1 and 6 involves an inventive step within the meaning of Article 56 EPC 1973.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to grant a patent with the following documents:

Description:     page 1 as filed during oral proceedings  
                  pages 2-4 as published

Claims:           1-6 as filed during oral proceedings

Drawings:         Figures 1-3 as published  
                  Figure 4 as filed during oral  
                  proceedings

Registrar:

Chair:

S. Sánchez Chiquero

G. Eliasson