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Datasheet for the decision of 29 September 2020

Case Number: T 0833/16 - 3.4.03

Application Number: 05735388.0

Publication Number: 1782404

IPC: G07F19/00

Language of the proceedings: EN

Title of invention:
APPARATUS FOR PREVENTION OF READING OF MAGNETIC CARDS

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

Opponents:
NCR Corporation
Startech Elektronik ve Bilg. Sis. San. Tic. Ltd.

Headword:

Relevant legal provisions:
EPC 1973 Art. 52(1), 56, 83, 84, 100(a), 100(b), 100(c)
EPC 1973 R. 58(5), 72(1)
RPBA 2020 Art. 15

Keyword:

Amendments - added subject-matter - main request (yes)
Inventive step - auxiliary request (yes)

Decisions cited:

G 0003/89, G 0011/91, G 0002/10, G 0003/14, T 0331/87, T 1852/13

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

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Case Number: T 0833/16 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 29 September 2020

Appellant: (Patent Proprietor 1)	Kronik Elektrik Elektronik Ve Bilgisayar Sistemleri Sanayi Ticaret Limited Sirketi Bostanci Yolu Cad. Keyap Carsi No. 67 34775 Yukari Dudullu Istanbul (TR)
Appellant: (Patent Proprietor 2)	TMD Holding B.V. Schapendrift 96 1261 HS Blaricum (NL)
Representative:	V.O. P.O. Box 87930 2508 DH Den Haag (NL)
Appellant: (Opponent 2)	Startech Elektronik ve Bilg. Sis. San. Tic. Ltd. Bilmo Mob. Küçük Sanayi Sitesi Aydinli Mah. Yanyol cad. Melodi Sokak No: 2-C-4 1. Blok Tuzla Istanbul (TR)
Representative:	Sevinç, Erkan Istanbul Patent A.S. Plaza-33, Büyükdere Cad. No: 33/16 Sisli 34381 Istanbul (TR)
Party as of right: (Opponent 1)	NCR Corporation 3097 Satellite Blvd. Duluth, GA 30096 (US)
Representative:	Secerna LLP The Old Fire Station 18 Clifford Street York YO1 9RD (GB)

Decision under appeal: **Interlocutory decision of the Opposition Division of the European Patent Office posted on 8 February 2016 concerning maintenance of the European Patent No. 1782404 in amended form.**

Composition of the Board:

Chairman G. Eliasson
Members: S. Ward
G. Decker

Summary of Facts and Submissions

I. This is an appeal against the interlocutory decision of the Opposition Division in the case of European patent No. 1 782 404. The Opposition Division decided that the patent could not be maintained as granted, as it comprised subject-matter extending beyond the content of the application as filed (Article 100(c) EPC), and that the auxiliary request met the requirements of the EPC.

II. Appeals were filed by appellant-opponent 2 (Startech Elektronik, hereinafter, "opponent 2") and the appellants-patent proprietors (hereinafter, "the proprietor"). Respondent-opponent 1 (NCR corporation, hereinafter, "opponent 1") did not file an appeal.

The proprietor requested in writing that the Board set aside the decision under appeal and "maintain the patent as granted, subsidiary in amended form".

Opponent 2 stated in writing that it "requests revocation of EP 1 782 404 B1".

Opponent 1 requested at oral proceedings that the appeal of the proprietor be dismissed.

III. Oral proceedings before the Board were held by videoconference at the request of opponent 1. Neither the proprietor nor opponent 2 joined the videoconference, having previously stated in writing their intention not to participate in the oral proceedings.

IV. The following documents are referred to in this decision:

E5: EP 1 067 474 A2
E6A: JP 2003-223620 A
E6B: English translation of E6A filed with the notice of opposition on 24 April 2014.

It is noted that the document numbering has not been consistent throughout the procedure; in particular, E5 has also been referred to as "D5", and E6B has also been referred to as "E6". In what follows, the label "E6" is used for E6A interpreted using E6B.

V. Claim 1 of the main request (i.e. of the patent as granted) reads as follows:

"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)."

The preamble of claim 1 of the auxiliary request is identical to that of claim 1 of the main request, and the characterising part reads as follows:

"characterised in that signals similar to the data on the card but self-repeating are formed around the coil (4, 17)."

Claim 6 of the auxiliary request reads as follows:

"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 but self-repeating, 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 but self-repeating are formed around the coil (4, 17)."

VI. The proprietor's arguments, insofar as they are relevant to the present decision, are summarised as follows:

(i) The omission in claim 1 of the granted patent of the signals being "self-repeating" did not violate Article 123(2) EPC. There was no inextricable linkage between the features "self-repeating" and "similar", and hence the omission of "self-repeating" was justified in the absence of any clearly recognisable functional or structural relationship between them.

Moreover, the person skilled in the art would directly and unambiguously recognise that: 1) self-repeating signals were not explained as essential in the disclosure; 2) they were not, as such, indispensable for the function of the invention in the light of the technical problem it served to solve; and 3) their removal would require no real modification of other features to compensate for the change.

It would be immediately evident to the skilled person that the disturbance is caused by the "similar" aspect of the signals interfering with the data signal of the card, not by the "self-repeating" effect, and there was no reason why the "self-repeating" aspect would contribute to the disturbing effect on the illegal card reader.

The omission of the "device 12" in claim 1 also did not add subject-matter.

(ii) The claimed subject-matter was sufficiently disclosed and involved an inventive step.

VII. The arguments of opponent 2, insofar as they are relevant to the present decision, are summarised as follows:

(i) The patentee disclosed only one embodiment of his invention supported by the description and the figures. When describing that single embodiment, the patentee indicated in page 4, lines 5-6 [*sic*, it appears that page 4, lines 7-8 is meant here] of the application as filed, the following expression: "The process of operating this coil is performed by the device (12)." The device (12) was responsible for the operation of the coil (17), and the operational parameters of the coil (frequency, amplitude and signal content) formed the gist of the invention. The device (12) was therefore an essential part of the invention, without which the coil could not be operated and the invention could not be carried out. Omission of the "device (12)" from claim 1 extended the subject-matter beyond the content of the application as filed contrary to the requirements of Article 123(2) EPC.

Article 84 EPC was also violated by this omission, as claim 1 did not comprise all the essential features, i.e. all features which were necessary for solving the technical problem with which the application was concerned.

(ii) The invention was insufficiently disclosed. According to the characterising feature of claim 1 of the auxiliary request, the signals formed around the coil were similar to the data on the card and were self-repeating. Self-repeating signals would have a certain duration (a starting moment and an ending moment), after which the same signal would be repeated. This duration was unknown from the application documents in breach of Article 83 EPC.

Card data was composed of a number of alphanumeric characters. There was no enabling disclosure in the specification as filed of the size or length of the data which was to be repeatedly signaled by the coil. The specification as filed, did not, therefore, disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art as required by Article 83 EPC.

(iii) E5 was the closest prior art. The distinguishing feature of claim 1 was the formation of signals similar to the data on the card but self-repeating. The effect of this feature was that the illegal card reader would read a jammed signal containing real card data and false card data formed by the coil.

The problem to be solved might be formulated as how to improve E5 so that the disturbant magnetic field was more effective preventing reading a magnetic card by a skimming device. It was trivial that signals had to be

used which are similar to the data on a card, because without giving any details about the frequencies, amplitudes, duration etc., it had to be trivial.

E6 disclosed a device for preventing skimming using card data dummy signal(s) which were identical to the "signal similar to the data on the card" as recited in opposed claim 1. The skilled person was clearly taught to use this dummy card data in overcoming skimmers because it is difficult to differentiate between real card data and dummy card data. Knowing that general teaching, the skilled person would immediately modify E5 to arrive at the subject-matter of claim 1.

VIII. The arguments of non-appealing opponent 1, insofar as they are relevant to the present decision, are summarised as follows:

(i) The specification consistently presented the signals as being self-repeating. The independent claims of the main request included within their scope devices that formed non-self-repeating signals, which contravened Article 123(2) EPC.

(ii) E5 disclosed the preamble of claim 1 of the main request, and the skilled person would arrive at the characterising part on the basis of common general knowledge. The skilled person looking for an appropriate disturbing magnetic field would recognise that there were essentially two possibilities: a magnetic field which swamped the card signal (as used in E5), or a magnetic field comprising signals similar to those read from the card. The use of the latter in place of the former would be an obvious possibility. Obviousness could also be demonstrated on the basis of the combination of E5 and E6.

Reasons for the Decision

1. The appeal is admissible.

As announced in advance, the duly summoned proprietor and duly summoned opponent 2 did not participate in the oral proceedings. According to Rule 71(2) EPC 1973, if a party duly summoned to oral proceedings does not appear as summoned, the proceedings may nevertheless continue, the party then being treated as relying only on its written case. As the present case was ready for a decision at the conclusion of the oral proceedings (Article 15(5) and (6) RPBA 2020), the voluntary absence of the above parties was not a reason for delaying the decision (Article 15(3) RPBA 2020).

2. *Main Request: Article 100(c) EPC 1973*

2.1 According to Article 100(c) EPC 1973, a patent may be opposed on the ground that "the subject-matter of the European patent extends beyond the content of the application as filed".

2.2 In the present case, the characterising part of claim 1 of the main request reads as follows:

"characterised in that signals similar to the data on the card are formed around the coil (4, 17)."

2.3 In the application as originally filed, that is to say, international application PCT/TR2005/000007, published as WO2006/001781 A1, the feature "signals similar to the data on the card" is disclosed only on page 1,

lines 24-25 and in claim 3, the exact disclosures being as follows:

"a coil with a ferrite core is placed and signals similar to the data on a card but self-repeating are formed around this coil" (page 1, lines 24-25).

"Signals similar to the data of the card for which magnetic field prevention will be performed but self-repeating form around the coil" (claim 3).

The Board sees no other potential basis in the application as originally filed for the characterising feature of claim 1 of the main request, nor has any other basis been suggested by the proprietor.

Hence, the characterising feature of claim 1 is only disclosed in the application as originally filed in combination with the additional limitation, "but self-repeating". The question is therefore whether this limitation may be omitted in claim 1 of the main request without introducing subject-matter which was not originally disclosed.

2.4 The proprietor essentially submits that, where two features are originally disclosed in combination, incorporating one of the features into a claim, while omitting the other, does not extend the subject-matter beyond the content of the application as originally filed, provided that there is no clearly recognisable functional or structural relationship between the two features.

It is not necessary for the Board to consider the validity of this general statement, since, in the present case, the Board does not accept that there is

no recognisable functional relationship between "self-repeating" and "similar to the data on the card". These two features are not disclosed as unconnected aspects of the invention which just happen to be found together in a single embodiment; they are the two characteristics defining the one type of magnetic signal generated by the coil which is disclosed in the application, and this fact alone is sufficient to establish a technical and functional relationship between them.

2.5 The proprietor's other argument in this regard is based on the "essentiality or three point test" first developed in decision T 331/87 (see *Case Law of the Boards of Appeal of the EPO*, 9th edition 2019, II.E. 1.4.4), according to which:

"the replacement or removal of a feature from a claim may not violate Article 123(2) EPC provided the skilled person would directly and unambiguously recognise that (1) the feature was not explained as essential in the disclosure, (2) it is not, as such, indispensable for the function of the invention in the light of the technical problem it serves to solve, and (3) the replacement or removal requires no real modification of other features to compensate for the change" (T 331/87, Reasons, point 6).

The proprietor argues that the amendment in question meets all three of these requirements. In particular, in relation to the second point, the skilled person would recognise that the invention could be carried out equally well with non-self-repeating signals.

2.6 The Board's view is that the primary question is not whether the amendment meets the requirements of the

"essentiality test", but whether this test is an appropriate way to judge compliance with the requirement of no extension of subject-matter.

2.7 In G 3/89 (referring to corrections), the Enlarged Board stated that an application or patent may be amended without introducing subject-matter extending beyond the application as filed, provided that the amendment made was:

"only within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge and seen objectively and relative to the date of filing, from the whole of [the description, claims and drawings] as filed" (G 3/89, Reasons, point 3).

The same formulation was used in G 11/91 (see Headnote, point 1), and was referred to as the "'gold' standard" in G 2/10 (point 4.3, final paragraph).

2.8 In the light of these developments, the essentiality test has been criticised in several more recent decisions (cf. *Case Law*, *supra*, II.E.1.4.4c). In T 1852/13, an extensive analysis of this test was presented (Reasons, points 2 to 2.4), and the deciding Board came to the conclusion that this test should no longer be applied. Instead, the "gold standard" was the appropriate test in all cases. In this respect, the present Board agrees with both the conclusion and the underlying reasoning of T 1852/13, and the "gold standard" will be applied in the present decision.

2.9 The decisive question is therefore not whether the skilled person would "recognise" that a self-repeating signal is not indispensable for the function of the invention in the light of the technical problem it

serves to solve, but whether a skilled person would *derive directly and unambiguously from the application as originally filed* the use of non-self-repeating signals, or that a self-repeating signal is merely optional or preferred.

In the Board's view, the answer to this question is no. As noted above under point 2.3, the application comprises no disclosure, explicit or implicit, or even the merest hint, of any signals other than self-repeating signals. Claim 1 of the main request therefore comprises subject-matter which extends beyond the content of the application as filed, and hence the main request of the proprietor that the patent be maintained as granted cannot be allowed in view of the requirements of Article 100(c) EPC 1973.

3. *Auxiliary Request: Article 100(c) EPC 1973*

3.1 The characterising part of claim 1 of the auxiliary request has been amended to include "but self-repeating", thus overcoming the above objection.

3.2 Opponent 2 raised a further objection under Article 100(c) EPC 1973, noting that in the description as filed (page 4, lines 7-8) it is stated that:

"The process of operating this coil is is [sic] *performed by the device (12)."*

The fact that this feature is not included in claim 1 (of either request) amounted, according to opponent 2, to an extension of subject-matter beyond the content of the application as filed.

3.3 Claim 3 as originally filed (which, while not formally presented as a dependent claim, implicitly has to be read in the context of claims 1 and 2) essentially defines the gist of the invention, which is now more clearly defined in claim 1 of the auxiliary request. The coil mentioned in original claim 3 (and claim 2) is not, however, defined to be operated by the "device (12)", which only appears in claim 8 of the original claims. For this reason alone, it is difficult to see why omission of the "device (12)" in claim 1 of the auxiliary request would constitute an extension of subject-matter beyond the content of the application as filed.

3.4 Moreover, the Board takes the view that including the "device (12)" would not add anything of substance to the claim. Claim 1 of the auxiliary request defines a card reader device comprising *inter alia* a coil with a ferrite core, wherein the coil is arranged to spread an electromagnetic field, and whereby signals similar to the data on the card but self-repeating are formed around the coil. It would therefore be implicit to the skilled reader that the coil would be connected to a suitable source of electrical signals, which, in operation, would cause the coil to generate an electromagnetic field of the claimed type, according to the well-known laws of electromagnetism.

Labelling this implicit source "a device (12)", and explicitly mentioning it in the claim, cannot be seen as adding anything of technical substance. If, technically, the claim means precisely the same thing with or without the contested feature, its omission can have no significance for the question of added subject-matter.

3.5 The Board is therefore satisfied that claim 1 of the auxiliary request does not introduce subject-matter extending beyond the content of the application as filed.

4. *Auxiliary Request: Article 84 EPC 1973*

4.1 Opponent 2 also argued that the absence of the "device (12)" in independent claims 1 and 6 meant that these claims lacked essential features, contrary to the requirements of Article 84 EPC (statement of grounds of appeal of opponent 2, section 1, in particular page 4, third paragraph).

4.2 Claims 1 and 6 of the auxiliary request are identical to claims 1 and 6 as granted, apart from the addition of "but self-repeating". Since the "device (12)" was not present in the granted independent claims, its absence from the independent claims of the current requests may not be objected to under Article 84 EPC 1973, either in opposition proceedings or in any appeal arising therefrom, in the light of decision G 3/14 (see Catchword).

5. *Auxiliary Request: Article 100(b) EPC 1973*

5.1 Opponent 2 argues that the patent does not specify such parameters as the signal length or data size (number of alphanumeric characters) and consequently that the requirements of Article 83/100(b) EPC 1973 are not met.

5.2 The gist of the invention is that an unauthorised card reader at the insertion slot would pick up both the signals read from the magnetic card as it is inserted into the machine, and the signals generated by the coil. The signals generated by the coil are arranged to

be sufficiently similar to the signals read from the magnetic card that it would be difficult or impossible for the unauthorised card reader to distinguish one from the other. As a result, the unauthorised card reader "will not be able to precisely read the data on the magnetic card", as set out in claim 1. The view of the Board is that arranging for appropriate signals to be generated by the coil for this purpose would be within the capabilities of the skilled person. Consequently, the requirements of Article 100(b) EPC 1973 are met.

6. *Auxiliary Request: Article 100(a) EPC 1973, Inventive Step*

6.1 As in the contested decision, E5 is seen as the closest prior art. In the embodiment of Fig. 8, described in paragraph [0049], E5 discloses 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 (5), the unit further comprising a coil (82) with a ferrite core (81), wherein the coil is arranged to spread an electromagnetic field, so that an unauthorised card reader (20) installed in front of the card insertion slot will not be able to precisely read the data on the magnetic card.

6.2 Claim 1 of the auxiliary request differs from E5 in that:

"signals similar to the data on the card but self-repeating are formed around the coil".

The feature "similar to the data on the card" is to be read in the context of the other other claimed features, in particular that the illegal card reader

"will not be able to precisely read the data on the magnetic card". The Board therefore understands "similar to the data on the card" to mean that the signals generated by the coil have a form which would make it difficult to distinguish them from signals read from a card being inserted into the machine. As a result, the unauthorised card reader would read a mixture of genuine card data and similar, but fake, data from the signals generated by the coil, thereby making it difficult or impossible to extract the genuine card data.

By contrast, in E5, the "current in coil 82 can be either direct or alternating" (paragraph [0049], final sentence). This would result in either a constant or an oscillating "disturbance magnetic field", which would not be similar to card data signals. The skilled person would understand that the disturbance magnetic field of E5 is intended to "swamp" the card data signal, and thus make it difficult or impossible to read.

6.3 On page 7 (fifth paragraph) of its statement of grounds of appeal, opponent 2 defined the problem solved by the characterising feature as "how to improve E5 so that the disturbant magnetic field is more effective preventing reading a magnetic card by a skimming device" (the term "skimming" referring to the unauthorised reading of card data). The proprietor refers to the function of the invention as "more effectively disturbing the process of reading of magnetic card data by a skimming device" (statement of grounds of appeal, page 3, fifth paragraph). According to the contested decision, both opponents and the Opposition Division accepted that the invention solved the problem of improving and rendering more effective

the system of E5 (Reasons, points 3.4.2.2, 3.4.2.3 and 3.4.2.5).

6.4 Hence, there is general agreement among the parties (and the Opposition Division also accepted) that the distinguishing feature of claim 1 represents not merely an alternative to the arrangement of E5, but an *improvement* over that system. However, there appears to be no explanation from any of the parties in the appeal procedure (and possibly not even in the opposition procedure) *why* the claimed card reader unit is considered to be more effective at preventing unauthorised reading of a card than that of E5.

6.5 In the opinion of the Board, a plausible answer to this question was given by the proprietor (then the applicant) in examination proceedings, on pages 3 and 4 of the letter dated 6 August 2010:

"In conventional so called 'digital' skimming, the signal that is picked up by the reading head of the illegal card reader is directly used for conversion to a F2F signal. Such skimming is relatively easy to disturb by using a magnetic noise signal that jams the illegal reading head."

"In more advanced so called 'analogue' skimming however, the signal read by the magnetic head of an illegal card reader is stored and decoded later by a processor in which it is attempted to filter out the noise from the original card data signal."

The letter then goes on to explain that according to the claimed invention:

"the reading of the illegal card reading head is disturbed by forming signals that are similar to the data on the card around the coil. This way, false peaks are induced that are difficult to filter out from the signal that is picked up by the illegal reading head."

6.6 Thus, while it may be possible to illegally recover the genuine card data by filtering out noise (or the simple DC or AC swamping magnetic field of E5), it would be more difficult to filter out the false peaks of the "signals similar to the data on the card" generated according to the invention. The Board is satisfied by this explanation, and accepts that the invention may be regarded as solving the problem of providing more effective security than that provided by the prior art.

6.7 Opponent 1 argued that, starting from E5, the skilled person would arrive at the characterising part of claim 1 on the basis of common general knowledge (opponent 2 also briefly argued that the characterising part of claim 1 was "trivial"). According to opponent 1, there were only two possibilities for a disturbing magnetic field: a swamping field as disclosed in E5 or a field mimicking card data. Both possibilities were obvious and the skilled person would choose one or the other without the exercise of inventive skill.

6.8 The Board is not persuaded by this argument. No evidence has been adduced that a disturbance magnetic field having the form of signals similar to the data on a card was part of the common general knowledge in the field, or even that it was known at all in the prior art. Nor is there any evidence that it was commonly known (or even appreciated anywhere in the prior art)

that such signals would provide improved security compared to a constant or AC magnetic field.

6.9 Opponent 2 argued (and opponent 1 agreed) that, starting from E5, the skilled person would arrive at the characterising part of claim 1 from E6, which also discloses a card reader with means for preventing illegal skimming.

6.10 The Board briefly summarises the disclosure of E6 as follows:

Fig. 1 of E6 depicts a card reader in which card data read by a card data reading section 1 is sent via a signal line 3 to a card data processing section 2 having CPU 21.

Fig. 2 shows a similar arrangement in which an unauthorised skimming device 4 has been electrically connected to the signal line 3. By this means card data which is read by the magnetic card reading section 1 and sent by the signal line 3 to the card data processing section 2 can be diverted to the skimming device 4 and stored in memory (EEPROM) 43 (path B in Fig. 2).

6.11 The solution to the skimming problem according to E6 is to provide a dummy signal transmission circuit 26 in the card data processing section 2. During a start-up phase the CPU 21 causes the dummy signal transmission circuit 26 to transmit card data dummy signals to the signal line 3 where they are input into the magnetic card interface 41 of the skimming device 4 (path C in Fig. 2) and written into EEPROM 43. This continues for a sufficient length of time to saturate the EEPROM 43 with dummy data.

Thereafter in normal card-reading operation, even if the data from a magnetic card is diverted to the skimming device 4, the card data cannot be stolen, as data cannot be written into the EEPROM 43, since it is saturated (paragraphs [0017] and [0018]).

6.12 According to the statement of grounds of appeal of opponent 2 (passage bridging pages 7 and 8), "E6 teaches using dummy card data for preventing skimming, because it is difficult to differentiate between dummy card data and real card data" and hence "the skilled person, knowing that general teaching, would immediately modify [E5] to provide what is in claim 1". Moreover, the "card data dummy signal disclosed by E6 is identical to the 'signal similar to the data on the card' as recited in opposed Claim 1 because the phrase 'card data dummy signal' can be nothing other than a signal containing fake card data" (page 8, second paragraph).

6.13 The Board does not agree. There is no disclosure in E6 of the form which the "card data dummy signals" take. Contrary to the submissions of opponent 2, E6 does not state that it would be difficult to differentiate between the dummy card data and real card data, nor is it disclosed in E6 that the card data dummy signals have a form similar to the data on the card.

Moreover, it is not implicit that the card data dummy signals of E6 would have the same form as the claimed signals "similar to the data on the card" on the basis of the respective functions which they serve. According to the present invention, the signals generated by the coil should be "similar to the data on the card" in order to confuse the unauthorised card reader by adding

realistic, but fake, data to that read from the inserted card. The sole disclosed function of the card data dummy signals in E6 is to occupy memory space and ultimately to saturate the EEPROM 43. On the basis of these entirely different functions, there is no reason to suppose that the two signals would have an identical, or even a similar, form.

6.14 Moreover, the card data dummy signals are disclosed in E6 as *electrical* signals. There is no disclosure of transforming them via a coil into magnetic signals, or of using them to form a disturbance magnetic field which is superimposed on the real data signals during the reading of the card, or that a magnetic field based on the card data dummy signals would be a more effective disturbance magnetic field than that of E5.

6.15 The skilled person looking to improve the arrangements of the closest prior art would either dismiss the idea of combining E5 and E6 on the ground that these documents represent two fundamentally different approaches, or (at most) would incorporate into E5 what is actually disclosed in E6, namely the use of electrical (not magnetic) card data dummy signals to saturate the unauthorised card reader memory in a step prior to normal operation. Either way, the skilled person would not arrive at the claimed invention.

6.16 The Board therefore judges that the card reader unit defined in claim 1 of the auxiliary request involves an inventive step within the meaning of Articles 52(1) and 56 EPC 1973. The same applies to the corresponding method of claim 6 of the auxiliary request for the same reasons, *mutatis mutandis*.

7. *Conclusion*

7.1 For the reasons given above, the Board concurs with the Opposition Division that the patent can be maintained according to the auxiliary request, but that the main request must be rejected.

7.2 The appeal of opponent 2 is based on the request that the decision under appeal be set aside and that the patent be revoked. Hence, this appeal must be dismissed.

7.3 In the statement of grounds of appeal, the proprietor formulated its requests as follows:

"The appellant requests the Technical Board of Appeal to set aside the Decision of the Opposition Division and to maintain the patent as granted, subsidiary in amended form."

In view of the above conclusion of the Board, the proprietor's main request that the decision under appeal be set aside and the patent maintained as granted, must be rejected.

7.4 The proprietor's auxiliary request is for the Board of Appeal to maintain the patent in amended form, i.e. according to the auxiliary request.
Since the interlocutory decision of the Opposition Division was that the patent could be maintained in just such an amended form, the Board does not feel called upon to deal separately with this request.
Neither the appeal of opponent 2 nor the appeal of the proprietor (according to its main request) has been successful, and dismissal of both of these appeals by the Board would have the effect that the decision of the Opposition Division would become final by operation

of law, meaning that the patent would be maintained according to the auxiliary request, subject to the proprietor meeting the formal requirements laid down in Rule 58(5) EPC 1973. Under these circumstances a specific request from an appealing party asking for this outcome is unnecessary and has no additional legal effect.

Order

For these reasons it is decided that:

1. The appeal of opponent 2 is dismissed.

2. The appeal of the patent proprietor is dismissed.

The Registrar: The Chairman:

S. Sánchez Chiquero G. Eliasson

Decision electronically authenticated