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D E C I S I O N
of 4 November 1996

Case Number: T 0837/94 - 3.5.2

Application Number: 87105564.6

Publication Number: 0241924

IPC: G11B 7/24

Language of the proceedings: EN

Title of invention:
Optically readable/writable card

Patentee:
OMRON TATEISI ELECTRONICS CO.

Opponent:
Landis & Gyr Technology Innovation AG

Headword:
-

Relevant legal provisions:
EPC Art. 56, 114(2)

Keyword:
"Inventive step (yes)"
"Late filed documents - one considered, others not"

Decisions cited:
-

Catchword:
-



Case Number: T 0837/94 - 3.5.2

D E C I S I O N
of the Technical Board of Appeal 3.5.2
of 4 November 1996

Appellant:
(Opponent)

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Respondent:
(Proprietor of the patent)

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Representative:

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Decision under appeal:

Decision of the Opposition Division of the
European Patent Office posted 28 June 1994
rejecting the opposition filed against European
patent No. 0 241 924 pursuant to Article 102(2)
EPC.

Composition of the Board:

Chairman: W. J. L. Wheeler
Members: R. G. O'Connell
L. C. Mancini

Summary of Facts and Submissions

1. The appellant (opponent) contests the decision of the opposition division rejecting its opposition to European patent No. EP 0 241 924.

II. The claims of the patent read as follows:

"1. An optically readable/writable card in which a transparent protection layer (3) is laminated so as to cover a recording medium layer (2) on a card substrate (1), characterized in that said transparent protection layer (3) is formed with a recess portion (4) at the position corresponding to said recording medium layer (2), and the bottom surface (4a) of said recess portion (4) is located lower than the surface of the card.

2. A card according to claim 1, wherein said recess portion (4) is formed by denting the upper surface of said transparent protection layer (3) at the position corresponding to said recording medium layer (2).

3. A card according to claim 1, wherein said recess portion (4) is formed by adhering a transparent seal material onto the upper surface of said transparent protection layer (3) excluding the position corresponding to said recording medium layer (2)."

III. In the notice of opposition the appellant requested revocation of the patent in its entirety on the grounds that the subject-matter of the claims of the patent was not new and did not involve an inventive step. The following prior art documents were submitted by the opponent in the first instance proceedings:

D1: EP-A-0 185 239
D2: DE-U-8 608 201

- D3: Patent Abstracts of Japan, vol 9, No. 127
(P-360)(1850), 31 May 1985
- D4: CH-A-588 358
- D5: CH-A-635 949
- D6: CH-A-657 574
- D6a: DE-A-3 138 559
- D7: US-A-3 838 252
- D8: Firmendruckschrift "Staufen Information",
25 January 1983, "Technische Information zu VKW-
ID-Karten-Folien"
- D9: US-A-4 263 503,

of which D8 and D9 were submitted after the expiry of the opposition period and were disregarded by the opposition division pursuant to Article 114(2) EPC.

- IV. On appeal the opponent (appellant) submitted the following additional documents:

- D10: US-A-3 619 024
- D11: US-A-4 141 400
- D12: EP-A-0 083 808.

The appellant explained that it was necessary to submit these further documents in view of the fact that the opposition division had excluded D9 from consideration while at the same time finding that it did not disclose relevant common general knowledge in the art. The purpose of D10, D11 and D12 was to document this common general knowledge in the art.

- V. The respondent objected to the introduction of documents D8 to D12 in view of their late submission and lack of relevance.

- VI. In a communication accompanying a summons to oral proceedings, which had been requested initially by both parties, the board informed the parties that it was

likely to disregard D8 but to admit D9 and consequently disregard D10, D11 and D12. It also pointed out that the background art referred to in the opposed patent appeared to be relevant; that in view of its potential importance as a starting point for determining the relevant technical problem, the board deemed it appropriate, in the interests of ensuring an objective consideration of the issues, to introduce the following document into the proceedings, as evidence of the fact that an optically readable/writable card, using the laser pit high density recording technique, of the kind described in paragraphs two and three of the description of the patent in suit was comprised in the state of the art within the meaning of Article 54(2) EPC before the priority date of the patent:

D13: WO 82/02 969, published 2 September 1982.

VII. In its communication the board also indicated that it was disposed to uphold the opposition division's interpretation of the term "recess", and that its interpretation of the teaching of D5, which differed from that which had prevailed in the proceedings so far, tended to a conclusion that the latter was not destructive of novelty. It also indicated that the appellant's attack on inventive step based on D9 appeared to establish what the skilled person addressing the relevant technical problem could have done rather than what he would have done.

VIII. The appellant argued essentially as follows:

D5 disclosed a payment means in the form of a card having optical markings. It had a substrate and recording layer (D5, reference numeral 6, "optical marks"). This was coated with a protective layer 2, which was transparent at least to the extent that the infrared light used for optical readout must traverse

it (D5, column 2, line 10). Whereas in Figure 1 of D5, the cover layer 5 extended over the full surface area, it was explained at column 2, lines 50 to 53, in connection with the embodiment of Figure 3, that the layer 5 covered the protective layer 2 only over a portion of its area which did not coincide with the optical marks 6; in other words, a recess was located at the position corresponding to the recording medium layer (optical markings). Hence claim 3 of the opposed patent could be read onto the Figure 3 embodiment of D5; the subject-matter of this claim was accordingly not new.

Figure 4 of D6a and its associated description also disclosed a card in which an (optical) recording medium layer 18 was disposed in a recess in the protective layer 17a. Apart from the embodiment described in which a signature strip served as the (optical) recording medium, attention was drawn to the possibility mentioned at page 14 of D6a of replacing the signature strip by a magnetic strip or the like. The sole difference between the subject-matter of the opposed patent and the disclosure of D6a was the absence in the latter of a thin transparent layer, which, however, would be an obvious measure to implement, eg to counteract airborne contaminants.

D9 also taught the person skilled in the art how he should proceed in order to protect an optically readable recording medium layer against scratching - and thus against corruption of data - by means of a "window technique". According to D9, column 1, lines 36 to 38, the problem to be solved was the protection of the recording medium layer. The solution taught by D9 (see column 2, lines 9, 40, 41, 49 and 50) was to recess the recording medium layer, ie to locate it in a cutout in a covering layer so that the recording medium proper did not come into contact with any solid

surfaces which could scratch it. The label 14 shown in Figs 2 and 3 of D9 was also a card shaped element and the plate 12 was made of transparent plastic (column 3, line 35). Although in the embodiment described in D9 this generally known principle of protecting optically readable surfaces against scratching was applied to containers, claim 1 of D9 was not limited in this way and could be readily applied to any conventional credit card.

IX. The respondent's arguments can be summarised as follows:

The invention resided in providing a protection layer (which could be multi-layered in itself) for a recording medium layer of an optically readable/writable card that was provided with a recess setting back the surface of the protection layer in the part thereof overlying the recording medium layer. These features were not anticipated or rendered obvious by any of the cited documents; see point 14 of the decision under appeal. As regards D5, the step in the thermochromic top layer 5 as shown in Figs 2 and 3 was of the order of 5 to 40 μm (cf. page 2, column 2, lines 17 to 19) and was too small to constitute a recess suitable for scratch protection. It was less than the size of most dust particles and slight bending of the card could result in the setback effect being eliminated.

X. The appellant requested that the decision under appeal be set aside and that the patent be revoked in its entirety. An initial auxiliary request for oral proceedings was effectively withdrawn when the appellant informed the board that it would not attend the oral proceedings which had been arranged.

- XI. The respondent requested that the appeal be dismissed. Auxiliarily it requested oral proceedings.
- XII. Following effective withdrawal of the appellant's request for oral proceedings the board considered the case and cancelled the oral proceedings.

Reasons for the Decision

1. The appeal is admissible.
2. *Admissibility of late documents D8 to D12*
 - 2.1 D8 was submitted after the expiry of the opposition period as a precaution ("höchst vorsorglich") as evidence of the general technological background. In view of its lack of specific relevance the board agrees with the opposition division that this document should be disregarded pursuant to Article 114(2) EPC.
 - 2.2 Although D9 was also submitted after the expiry of the opposition period, it was filed in response to the provisional view expressed in the communication of the opposition division as to the interpretation of the term "recess" in the claims of the opposed patent and is therefore not necessarily to be disregarded pursuant to Article 114(2) EPC. In view of its relevance, the board admits this document for full consideration in the appeal proceedings.
 - 2.3 D10, D11 and D12 were submitted for the first time with the statement of grounds of appeal. The appellant maintained that it was necessary to submit these documents in view of the fact that the opposition division had excluded D9 from consideration while at the same time finding that it did not disclose relevant

common general knowledge in the art. The purpose of D10, D11 and D12 was to document this common general knowledge in the art. Since the board is admitting D9, this reason for seeking to introduce D10, D11 and D12 does not apply. On a *prima facie* consideration they are less relevant than D9 to the subject-matter of the opposed patent and unlikely to affect the outcome of this appeal; accordingly they will be disregarded pursuant to Article 114(2) EPC.

3. *Claim interpretation and novelty*

3.1 The issue of novelty was raised in relation to prior art documents D4, D5 and D6a on the basis of a broad interpretation of the word "recess" which would include an internal hollow space. However, in the context of the patent document as a whole the term *recess* cannot reasonably be interpreted to extend to a cavity within the body of the card of the kind referenced by numeral 13 in Figure 5 of D4, since such a cavity would not be relevant in avoiding scratches during use of the card as envisaged in the teaching of the opposed patent.

3.2 As regards the card disclosed in figure 3 of D5, neither the protective layer 2 nor the cover layer 5 on the upper surface of the card is transparent, either to visible or to infrared light. The data recorded by optical marks 6 on the upper surface of the substrate 1 is read by infrared light which penetrates the protective layer 3 on the lower surface of the card and the substrate; cf D5, column 2, lines 8 to 11 and lines 27 to 30. The layer 3 is not formed with a recess.

3.3 As regards D6a, it is common ground that neither the signature strip 18 in figure 4 nor any suggested substituents such as magnetic strips (D6a, page 11, lines 31 to 34; page 14, lines 7 to 9) is disclosed as

having a transparent protective layer as required by the terms of the claims, quite apart from the question of whether the cards disclosed in D6a can reasonably be regarded as "optically readable/writable" cards in the sense of the claims of the patent. These comments apply equally to D1 (Figure 4).

3.4 In view of the above considerations the board finds therefore that, having regard to the available prior art, the subject-matter of each of the claims is new.

4. *Closest prior art and problem underlying the present invention*

4.1 In the judgement of the board the closest prior art is an optically readable/writable card using the laser pit high density recording technique as referred to in the introductory part of the description of the opposed patent, column 1, lines 1 to 27, and as reflected in D13. Furthermore, the problem as stated in the application as filed (patent, column 2, lines 6 to 19) relative to the background art indicated in the patent (and now documented by D13) is the relevant objective technical problem for the purpose of assessing inventive step; cf. D13, whole document, and in particular page 3, lines 22 to 26. None of the other documents represents closer prior art in the sense of addressing the same general problem in the same technical field and having more features of the solution.

4.2 No contribution to inventive step is involved in the formulation of this problem since it would become apparent in use that the transparent protective layer was itself subject to scratching.

4.3 None of the documents cited relating to cards, even magnetic cards, suggests a solution in the form of a recessed protective layer. Where protective layers are used, they are not recessed (D3, D5, D7, D13) and where recess protection is used there is no protective layer (D1, D2, D6).

4.4 The question which remains, therefore, is whether the skilled person, starting from D13, and addressing the problem as stated in the opposed patent, would seek and find a suggestion pointing towards the solution in the neighbouring field of bar code labels, in particular in D9. Although the opposition division did not permit this document to be introduced into the proceedings, it did nevertheless provide a rather full assessment of its relevance on inventive step at point 12 of the decision under appeal. The appellant's argumentation in the statement of grounds of appeal in this respect appears only to establish that the D9 solution could have been adopted by the skilled person, whereas, of course, the onus is on the appellant to establish that it would have been adopted. The appellant's assertion that claim 1 of D9 is sufficiently broad to apply to credit (type) cards is, even if it were to be accepted, not persuasive since a patent claim generally, if not invariably, encompasses more than the description discloses. The fact that something is covered by a claim does not necessarily mean that it is disclosed or obvious.

4.5 Although bar code labels and optical cards of the kind known from D13 are both designed to be read by laser beams, the former are typically flexible, carry low density printed marks, are attached or adhered to articles of diverse shapes and are designed to be read by a hand-held scanner or wand, whereas the latter are self-contained articles, stiff enough to be carried without damage in a wallet or pocket, carry high

density codes written by a laser beam and are designed to be inserted into a machine to be read. The technical problems associated with the fields of use, manufacturing methods and performance specifications of the two items are correspondingly different, so that a skilled person addressing the technical problem referred to at point 4.1 above would not be expected to find inspiration in a teaching relating to the securing of a bar code label to an article by means of a plate provided with a wand-guiding slot. A certain analogy can be discerned in the solutions, but, in the judgement of the board, the problems were not analogous, so that it would not have been obvious to the skilled person, who had no foreknowledge of the teaching of the patent in suit, to consult D9 and apply its teaching in modified form to an optically readable/writable card.

4.6 Hence the subject-matter of each of the claims involves an inventive step within the meaning of Article 56 EPC.

Order

For these reasons it is decided that:


The appeal is dismissed.

The Registrar:



M. Kiehl

The Chairman:



W. J. L. Wheeler