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**Datasheet for the decision  
of 19 November 2024**

**Case Number:** T 2279/22 - 3.2.05

**Application Number:** 15714261.3

**Publication Number:** 3122568

**IPC:** B42D25/24, B42D25/333,  
B42D25/45, B42D1/00, B42D3/06

**Language of the proceedings:** EN

**Title of invention:**  
Security booklet

**Patent Proprietor:**  
HID CID LIMITED

**Opponent:**  
Istituto Poligrafico e Zecca dello Stato S.p.A.

**Relevant legal provisions:**  
EPC Art. 108, 83, 123(2), 54(1), 56  
EPC R. 99(2), 101(1)

**Keyword:**  
Admissibility of appeal (yes)  
Sufficiency of disclosure (yes)  
Amendments - added subject-matter (no)  
Novelty (yes)  
Inventive step (yes)

**Decisions cited:**

G 0003/14, T 0409/91, T 2290/12, T 2773/18, T 0500/20,  
T 0447/22



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Case Number: T 2279/22 - 3.2.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.05**  
**of 19 November 2024**

**Appellant I:** Istituto Poligrafico e Zecca dello Stato S.p.A.  
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**Decision under appeal:** **Interlocutory decision of the Opposition**  
**Division of the European Patent Office posted on**  
**1 August 2022 concerning maintenance of the**  
**European Patent No. 3122568 in amended form.**

**Composition of the Board:**

**Chairman** P. Lanz  
**Members:** T. Vermeulen  
F. Blumer

## **Summary of Facts and Submissions**

- I. Both the opponent and the patent proprietor filed an appeal against the interlocutory decision of the opposition division finding that European patent No. 3 122 568 as amended according to the second auxiliary request met the requirements of the European Patent Convention.
- II. The opposition was filed against the patent as a whole on the basis of the grounds for opposition under Article 100(a) together with Article 54(1) EPC (lack of novelty) and Article 56 EPC (lack of inventive step), under Article 100(b) EPC and under Article 100(c) EPC.
- III. In the decision under appeal, the opposition division came to the following conclusions.
- The requirements of Rule 80 EPC, Article 84 EPC and Article 123(2) EPC were met in respect of the main request.
  - The patent as amended according to the main request did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 83 EPC).
  - The requirements of Rule 80 EPC, Article 123(2) and (3) EPC, and Article 83 EPC were met in respect of the first auxiliary request.
  - The subject-matter of claim 1 of the first auxiliary request was novel over document EP 2 433 810 A1 (D1) and involved an inventive step.
  - There was an inconsistency between the wording of claim 1 and the description of the first auxiliary

request so that the requirements of Article 84 EPC were not met.

- In respect of the second auxiliary request the requirements of the EPC were met.

IV. The parties were summoned to oral proceedings. In a communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA), the parties were informed of the board's provisional opinion on the issues of the case.

V. Oral proceedings before the board were held on 19 November 2024. During the oral proceedings, the patent proprietor submitted a sheet entitled "figures as submitted with our letter of 25 June 2021".

VI. Appellant I (opponent) requested that the patent proprietor's appeal be held inadmissible. Furthermore, the opponent requested that the decision under appeal be set aside and that the patent be revoked. It was also requested not to admit the first and second auxiliary requests underlying the decision under appeal and the further requests filed on appeal as auxiliary requests 1 to 40.

The requests of appellant II (patent proprietor) were as follows:

- to set aside the decision under appeal and to maintain the patent as amended on the basis of the claims and the description of the main request underlying the decision under appeal or, alternatively,
- to set aside the decision under appeal and to maintain the patent as amended on the basis of the claims and the description of the first auxiliary

- request underlying the decision under appeal, or, further alternatively,
- to dismiss the opponent's appeal (second auxiliary request) or, further alternatively,
  - to set aside the decision under appeal and to maintain the patent as amended on the basis of the claims and the description of one of the third to fourteenth auxiliary requests filed as auxiliary requests 1 to 12 with its statement of grounds of appeal or, further alternatively,
  - to set aside the decision under appeal and to maintain the patent as amended on the basis of the claims and the description of one of the fifteenth to forty-first auxiliary requests filed as auxiliary requests 13 to 39 with its letter dated 2 October 2023 or, further alternatively,
  - to set aside the decision under appeal and to maintain the patent as amended on the basis of the claims and the description of the forty-second auxiliary request filed as auxiliary request 40 with its statement of grounds of appeal.

In the following, appellants I and II will be referred to as 'the opponent' and 'the patent proprietor'.

VII. Claims 1, 4, 8, 9, 14 and 17 of the main request have the following wording (the feature numbering used by the parties for claim 1 appears in square brackets):

"1. [**F1**] A security booklet comprising [**F2**] i) a cover (1) foldable about an axis (5); [**F3**] ii) a set of page sheets (10) stitched together along the axis about which they can be folded to define a set of pages (14B-14E), wherein [**F4**] iii) one part (14B2) of one of the page sheets (10B) laterally offset from the axis (5) is adhered to the cover (1), while another part

(14B1) of the said one page sheet can be folded separately from the cover and the other pages about the axis, characterised in that [F5] each page sheet (10) is formed of a single fibrous sheet; and in that [F6] another page (10A1) of the set of pages is adhered to another part of the cover (1) laterally offset from the axis (5)."

"4. A booklet according to claim 1, wherein said one page sheet (10B) includes a further part (41A) adhered to the cover (1) on the opposite side of the axis (5) to the side to which said one part (41D) is adhered, wherein said further part preferably comprises a second end page."

"8. A booklet according to any of the preceding claims, wherein said another part (14B1) of said one page sheet is formed by a page provided with personalized data."

"9. A booklet according to claim 8, further comprising a transparent or translucent plastics protective member laminated over the personalized data."

"14. A booklet according to any of the preceding claims, wherein the thickness of said one page sheet (10B), and preferably all the page sheets, is substantially uniform, and wherein said uniform thickness is preferably less than 200 $\mu\text{m}$ , more preferably less than 175 $\mu\text{m}$ , and most preferably in the range 100-150 $\mu\text{m}$ ."

"17. A booklet according to claim 16, wherein the security features are registered with individual pages."

VIII. The parties' submissions may be summarised as follows.

*Admissibility of the patent proprietor's appeal*

- *Opponent*

The patent proprietor's requests were not substantiated with respect to the decision under appeal. The statement of grounds of appeal contained supporting arguments which did not indicate or imply its reasons for setting aside the decision under appeal. Instead, they were a mere repetition of what had already been presented during the opposition proceedings, in particular in the reply to the notice of opposition. Such an approach would oblige the board and the other party to completely re-examine the patent proprietor's case. The case law confirmed that this was against the purpose of the appeal proceedings to review the decision under appeal in a judicial manner.

Furthermore, new requests were presented for the first time on appeal without giving reasons justifying their submission. This was all the more important since the objection of sufficiency of disclosure persisted in the auxiliary requests. Hence, the patent proprietor's appeal must be rejected as inadmissible under Rule 99 EPC in conjunction with Rule 101 EPC. Furthermore, also Article 12(2) RPBA was violated.

- *Patent proprietor*

The decision that the invention was not sufficiently disclosed in respect of claims 4 to 7 of the main request was incorrect. Therefore, the patent proprietor had filed its main request again on appeal. In its statement of grounds of appeal, the patent proprietor



had made clear that the decision against claims 4 to 7 was based on a misinterpretation of the whole disclosure of the original application documents. It was extensively explained why the opposition division had conceived an artificial interpretation that was inconsistent with the skilled person's interpretation. Accordingly, and contrary to the opponent's allegations, it was clearly and concisely set out why the patent proprietor considered the decision to be defective. The fact that some arguments had already been presented during the opposition proceedings or did not go beyond those made before the opposition division was not detrimental to the admissibility of the appeal. Arguments needed not be new to make the appeal admissible. Hence, the patent proprietor's appeal was admissible.

*Interpretation of the claim wording*

- *Opponent*

A "page" of a security booklet was one of the two leaves into which a page sheet was separated by the stitching and folding axis common with the cover, see feature F3. This definition was consistent with the description of the contested patent. The fact that, in the embodiments of Figures 3 to 6 of the patent, some elements defined by folds that did not correspond to the stitching axis were also referred to as "pages" did not change the above definition. In the wording of feature F4 of claim 1, "one part" of "one of the page sheets" was adhered to the cover and "another part" of "the said one page sheet" - that is, the same page sheet - was free from the cover and could be folded separately. Therefore, the term "part" clearly referred to a portion of a page sheet. The page sheet was

stitched along the axis of the booklet and the "*another part*" was laterally offset in order to be freely foldable about the axis. It followed therefrom that the "*one part*" and the "*another part*" were arranged at opposite sides of the stitching and folding axis on different pages of the same page sheet. Hence, the only sensitive interpretation of the expression "*another page*" of feature F6 was that it was part of a different page sheet than that mentioned in feature F4. Accordingly, no reading of claim 1 was possible in which "*another part*" and "*another page*" were integrally formed as parts of the same page sheet.

Feature F5 was broader than the specific disclosure of paragraph [0020] of the patent. The term "*single*" did not mean that each page sheet had to be made only of a fibrous element and that no other layers or elements could be applied thereto. No manufacturing steps were recited in claim 1. Therefore, a limitation in terms of the number of forming layers of the final pages forming the booklet or the specific material of the page sheet was not implied by feature F5.

The "*further part*" in dependent claim 4 of the main request was clearly distinct from "*another page*" recited in claim 1. It was part of the one page sheet of feature F4 on the opposite side of the folding and stitching axis with respect to the "*one part*". Hence, it had to be on the same page as the "*another part*" of feature F4. However, this would mean that there was no way the "*another part*" could be freely folded. The patent proprietor's interpretation was based on an inconsistent double meaning of "*another page*" of feature F6.

- Patent proprietor

The claims had to be read giving the words the meaning and scope which they had in the field of security booklets. In particular, the skilled person was well aware of the difference between a "page" and a "page sheet" of a security booklet. The "one part" of feature F4 must be positioned on a first page of the page sheet. In order to be foldable separately from the cover, the "another part" must be positioned on a second page. Consequently, feature F4 implicitly defined a first and a second page of one and the same page sheet. Taking the above into account, the "another page" of feature F6 inherently defined a third page different from the first page and the second page. Feature F6 did not specify, however, whether the third page was integrally formed with the first and second page as part of one single page sheet, or if it was provided on another page sheet. In the embodiments shown in Figures 3 to 5 of the contested patent, the first alternative applied. In the embodiments shown in Figures 1, 2 and 6 of the patent, the second alternative applied. As the subject-matter of claim 1 covered two different embodiments, it was not inconsistent with the embodiment of Figures 3 to 5.

Feature F5 was limiting both in terms of the number of forming layers and the specific material of the page sheet. Firstly, the skilled person understood by "single" that the sheet could not be made of a sandwich structure. This was the proper understanding of the term "single", as was clear from paragraph [0020] of the patent. Secondly, the skilled person understood the expression "fibrous material" in the sense that the

sheet was formed from cotton and/or cellulose and/or synthetic fibres, see also paragraph [0020].

It was clear to the skilled person that the subject-matter of dependent claim 4 of the main request, by introducing a "*further part*" of the one page sheet 10B, limited the embodiments of claim 1 to the first alternative where the "*another page*" was part of the page sheet of feature F4. The skilled person would not understand the "*further part*" of claim 4 as being different from the "*another page (10A1) of the set of pages*" of feature F6.

*Sufficiency of disclosure (Article 83 EPC)*

- *Opponent*

As the "*further part*" of claim 4 was clearly distinct from the "*another page*" recited in claim 1, claims 1 and 4 were irreconcilable. In fact, they related to alternative embodiments. Interpreting the "*further part*" as "*another page*" would be the result of an *ex post facto* analysis. The skilled person would realise that such was not intended by the contested patent. Actually, the patent proprietor had acknowledged during the oral proceedings before the opposition division that the additional feature of claim 4 was intended as an alternative to feature F6 of claim 1, see section 10.2 of the minutes and page 10, first three paragraphs of the decision under appeal. Furthermore, the embodiments of Figures 3 to 6 of the patent lacked feature F6 of claim 1. The reference signs 10A1 and 41A in Figure 4 of the patent were clearly a mistake, because this particular embodiment only concerned a single page sheet with folded sections (see also paragraph [0016] and claim 6 of the patent). Thus, not

a single embodiment of the contested patent disclosed all features of the combined subject-matter of claims 1 and 4. However, it was uncontended in the case law of the Boards of Appeal that a detailed description must be given of at least one way of carrying out the invention. According to the decision T 409/91, the requirements of sufficient disclosure of the invention pursuant to Article 83 EPC gave effect to the legal principle that the patent monopoly should be justified by the technical contribution to the art. In its provisional opinion, the board criticised the mention of T 409/91 in the decision under appeal and rather privileged the principles expressed in decision T 500/20 concerning inventions in the field of mechanics. Nevertheless, T 500/20 was very different from the present case in that no contradiction between the description and the claims existed and the description fully supported the claimed subject-matter by examples all falling within the claimed scope. T 500/20 confirmed that at least one embodiment of the invention must be disclosed. In contrast, in the present case none of the embodiments were according the claims. The board's provisional opinion acknowledged that the embodiment of Figure 4 of the patent was not covered by the combined terms of claims 1 and 4 of the main request. The conclusion of T 500/20 that the skilled person would readily exclude (exotic) embodiments that would not work in practice, even if these theoretically fell under the claimed subject-matter did, therefore, not depict the actual situation of the present case. Even when applying the principles of T 500/20, the conclusion that the invention according to a combination of claims 1 and 4 of the main request could not be put into practice did not change.

Paragraph [0020] of the contested patent did not enable the manufacturing of any "*single fibrous sheet*" according to the terms of claim 1. The few explanations provided by the patent proprietor merely concerned manufacturing steps. However, such steps were not recited in claim 1, which related to a product and not to a process. As far as paragraph [0049] of the patent was concerned, it referred to the embodiment shown in Figure 3 which was not part of the claimed invention. But even if its teaching were taken into account, the paragraph only mentioned the planar dimensions of a single sheet without explaining anything about the structure of the page sheet itself, the number of layers or the material of the page sheet. Moreover, paragraphs [0030] to [0033], [0049] and [0058] of the patent were ambiguous with regard to the number of layers the "*single*" sheet could possess. Therefore, the skilled person was not in a position to put into practice feature F5 over the whole scope of the claim.

Claim 9 required that the protective member was laminated over the personalized data. Claim 8, on which claim 9 depended, provided that the "*another part*" was formed by a page provided with personalised data. Hence, the protective member of claim 9 was part of the page of claim 8 and, thus, of the page sheet which defined that page in the terms of claim 1. But, according to feature F5, each page sheet must be formed as a single fibrous sheet. Claim 9 was thus affected by an ambiguity permeating its whole scope, therefore leading to an insufficient disclosure.

Claim 14 of the main request comprised the expression "*substantially uniform thickness*". This had to be understood in the sense that the thickness did not vary along the page sheet. In contrast, paragraph [0024] of

the contested patent stated that only 60 or 70% of the same page sheet was uniform in thickness. Even if the percentage of 60% of uniform thickness represented the majority of the sheets, it did not represent the common meaning of "*substantially*" with respect to the totality of the sheet extension. Given that a disclosure was lacking that explained how the thickness was distributed throughout the security booklet, the skilled person would not be able to implement the invention.

The limitation implied by the expression "*registered with*" of claim 17 was so obscure to the skilled person that they would be unable to put it into practice. Paragraph [0035] of the contested patent did not have any relevance for implementing the invention since it was strictly related to the concertina embodiments which were not part of the claimed invention. In any case, the paragraph did not disclose any teaching or example with regard to the way security features should be considered "*registered with*" individual pages.

For the above reasons, the requirements of Article 83 EPC were not met.

- *Patent proprietor*

The skilled person understood the subject-matter of claim 1 such that two different embodiments were covered, one of which was characterised by an integral formation of the "*another page*" with the first and second pages of the first page sheet. The skilled person was clearly taught by the whole disclosure of the patent that the only reasonable interpretation of the wording of claim 4 of the main request was that the "*further part*" corresponded to the "*another page*".

Hence, the embodiments of Figures 3 to 6 were consistent with the wording of claim 1. But even if they were not consistent, this would be rather an issue under Article 84 EPC which could not be examined, in accordance with decision G 3/14.

Also the opponent's objection against feature F5 concerned a clarity issue rather than an issue with sufficiency of disclosure. The skilled person learned from paragraph [0020] of the contested patent that the single fibrous sheet was formed from cotton and/or cellulose and/or synthetic fibres, and preferably a sheet of paper obtained by wet processing and in particular on a cylinder mould paper machine or a Fourdrinier paper machine. Thus, for the skilled person it was clear what material had to be used. Furthermore, paragraph [0020] stated that, even when the manufacturing process used two plies joined at the wet end of the paper machine while the fibres were still wet, once manufactured, this would result in a single sheet without any division in plies. Thus, at least from this paragraph the skilled person knew that "*single*" corresponded to a single layer structure.

The feature "*plastic protective member laminated over the personalized data*" of claim 9 was not in contradiction with claim 1. Anyway, that would be rather a clarity issue. The feature in question did not contravene Article 83 EPC since it was described in paragraphs [0030] and [0031] of the patent that the plastic protective member was a relatively thin layer, preferably approximately 10µm thick. For the skilled person, it was clear that such a protective member was not the single fibrous sheet, but an element that might be added thereto.



Also the opponent's objection against the feature "*substantially uniform*" thickness of the one page sheet in claim 14 was a clarity issue. It did not contravene Article 83 EPC, because it was disclosed in paragraph [0024] of the contested patent that "*substantially uniform*" referred to a portion of at least 60 or 70% of the sheet. It was also explained there that any non-uniformities in thickness might be due to security features such as watermarks, apertures or windows that caused local variations in the sheet thickness.

The additional feature of claim 17 of the main request contained the expression "*registered with*". Also here, the opponent's objection against this feature was rather a clarity issue. Paragraph [0035] of the patent taught that security features such as security printing, security threads or watermarks might be registered with individual pages or between pages, whereby the registration was observable when the pages were folded. It was unclear why the skilled person should not be able to put this into practice.

Thus, the requirements of Article 83 EPC were met.

*Added subject-matter (Article 123(2) EPC)*

- *Opponent*

The deletion of the passage from paragraph [0013] of the granted patent cancelled any reference to the two alternatives for "*the other end page*", including that it might be formed by "*another page*" of the set of pages which, according to paragraph [0002], were stitched together. Accordingly, the remaining wording of paragraph [0013] covered a plethora of possible constructions not necessarily entailing that the

"*another page*" was part of the stitched set of pages. Therefore, contrary to the reasoning of the decision under appeal, it was not clear that, when paragraph [0013] referred to "*the another page*", it concerned the "*another page*" of claim 1 of the main request. In summary, the deletion of the passage from paragraph [0013] cancelled limiting features and broadened the disclosure of the application as originally filed, contrary to the requirements of Article 123(2) EPC.

- *Patent proprietor*

The deleted passage from paragraph [0013] of the patent disclosed, by way of expressions such as "*may be*" and "*preferred*", that there were different options to provide the other end page of the security booklet. The sentence following this passage provided further details to the option in which the other end page was provided on another page of the set of pages. The definite article used in conjunction with "*another page*" was a reference to claim 1 mentioned in paragraph [0007] of the patent. Thus, not just *any* another page was referred to in paragraph [0013]. Moreover, in the complete disclosure of the contested patent, the term "*another page*" was used in the context of claim 1, i.e. that it was the "*another page of the set of pages*". By deleting the passage from paragraph [0013], the disclosure had been amended such that the number of different options in the contested patent was limited to the provision of the other end page on another page of the set of pages. Consequently, the amendment narrowed the subject-matter compared to the originally filed disclosure. It did not result in an extension of the subject-matter beyond the content of the application as originally filed. The opponent's

interpretation did not correspond to the understanding of the skilled person.

*Novelty*

- *Opponent*

Document D1 disclosed all features of claim 1 of the main request.

The security booklet shown in Figure 1B of document D1 comprised a set of page sheets 4, 5 and what was referred to in the document as a "cover sheet" 3 (see paragraph [0018]). However, the skilled person would understand the technical teaching of document D1 in such a manner that the external layer 31 could also be considered as the cover. The fact that document D1 disclosed a three-layer cover sheet 3 including the flyleaf layer 32, whereas the opposed patent called "cover" only the most external layer 1 to which a Teslin layer 4 and end pages 10A1, 10A2, 14B2 of Figure 1 were adhered, was a matter of word choice, not of technical disclosure. It had to be taken into account that the inlay 600 and the flyleaf layer 32 of document D1 were stitched to the set of page sheets 4, 5 and, together with the sheets, operatively formed a book block (see paragraphs [0040] to [0045] and Figures 1B, 2B to 2D, 3A of document D1). With layer 31 as the cover, one part 402 of the page sheet 4 was adhered to the cover, while another part 401 of that sheet laterally offset with respect to the folding line was freely foldable. The page of the inner flyleaf layer 32 of document D1 laterally offset from connecting page 402 then defined the claimed "another page of the set of pages" according to feature F6. Its configuration as an end page was exactly the same as page 10A1 according

to the embodiment of Figure 1 of the contested patent. If this meant that the one part 402 of page sheet 4 was adhered to the cover 31 indirectly through the flyleaf layer 32, the same was true in the embodiment of Figure 1 of the patent where the one part 14B2 was adhered to the cover 1 via the Teslin inlay 4 and via the tab 10A2. Actually, the patent used the term "*adhered to*" both in embodiments with and without intermediate layers.

Feature F5 was very general in the vocabulary of the contested patent and read upon a sheet with plastic material layers as disclosed in document D1. It was straightforward and implicit for a skilled person that the polyester layer of document D1 was inherently made of fibres in order to be a flexible material (see paragraphs [0023], [0025], [0029]). Interpretation of a claim in view of the description could not be taken to the point of reading into the claim features which were not expressly recited therein, against the clear linguistic structure of the claim. In the present case, the features in the description of the patent concerning the manufacturing steps could not be regarded as intrinsic in the product claim.

- *Patent proprietor*

Document D1 taught that the cover of the security booklet was formed by the cover sheet 3. Considering instead that the layer 31 formed the cover was an inadmissible *ex post* interpretation of document D1 based on knowledge of the present invention. The figures of document D1 showed that, in a first step of the manufacturing process, the intermediate layer 600 and the internal flyleaf layer 32 of the cover 3 were glued together producing a first assembly 7. Only in a

next step, the data sheet 4 was glued to the first assembly 7, obtaining a second assembly 8. Subsequently, the set of pages 5 was glued to the second assembly 8 so as to form a third assembly 9. The mere fact that the assembly 9 was provided with a seam was no indication that the skilled person would consider the flyleaf layer as being a part of the set of pages and not of the cover 3. To the contrary, the manufacturing process of document D1 emphasised that the security booklet was an assembly of the three separate components 3, 4, and 5. As the data page 4 was positioned between the flyleaf layer 32 and the set of pages 5, the flyleaf layer was clearly not part of the set of pages but part of the cover. Consequently, there was no "*another page of the set of pages*" and document D1 did not disclose feature F6.

In document D1, the data sheet 4 comprised first and a second layers 41, 42 and an intermediate layer 43. Thus, data sheet 4 had a sandwich structure different to a single fibrous sheet. Furthermore, the first and second layers 41, 42 were made of polycarbonate which might consist of or comprise polyester (see claims 1 and 3 of document D1). There was no explicit or implicit disclosure in document D1 that the intermediate layer could be considered as made of a fibrous material. As described in paragraphs [0030], [0031] of the contested patent, a transparent or translucent plastic protective member was an additional thin element that was not a single fibrous sheet. Feature F5 had to be read together with features F3, F4 and F6: each page sheet had to be a single fibrous sheet. Only in paragraph [0031] of document D1 was the set of paper page sheets 5 mentioned. Therefore, document D1 did not disclose feature F5 either.

*Inventive step*

- *Opponent*

The subject-matter of claim 1 of the main request did not involve an inventive step either when starting from document D1 or from the prior art mentioned in the contested patent, both in combination with common general knowledge.

As regards the objection starting from document D1, it was disputed that any type of fibrous data page would have a lower security level than a plastic data page. In contrast to the reasoning in the decision under appeal, feature F5 did not require that the skilled person should have had to substitute the entire sandwich structure of the polycarbonate data sheet of document D1 by any type of fibrous data sheet. Replacing a single layer by fibrous material would have been sufficient. The patent also disclosed additional layers of plastic, for example to embed personalised data, see paragraphs [0030] to [0033] and claims 9 and 10. This was confirmed by the term "[t]ypically" in paragraph [0023] of the patent. The opponent further disagreed with the opposition division's reasoning that paragraph [0011] of document D1 disclosed that it was easier to introduce security elements in plastic pages rather than in any kind of paper pages. On the contrary, from this paragraph it could be deduced that the plastic page was not relevant for the security assessment of the booklet. Therefore, the skilled person would have understood from document D1 that it was possible to personalise the data sheet of the booklet, for example with security elements, regardless of the type of material used for the page sheets. When starting from document D1, the objective technical

problem was to find a suitable alternative material for one of the layers of page sheet 4 of document D1. The skilled person would have been aware of the material used for the intermediate layer 43 of document D1. Choosing paper - which is the most obvious choice and is well-known to have flexible properties - for any of layers 43, 44, 45 to 48 as well as for the other pages 5 of the booklet of document D1 would have been a routine choice within the full general knowledge of the skilled person. This was all the more so since layer 43, which could be changed to extend further beyond the area of the seam 2, was made of polyester and, thus, already had a fibrous structure. Moreover, document D1 disclosed that the presence of the flexible layer 43 reduced polycarbonate rigidity in correspondence of the seam, see paragraph [0028], prompting the skilled person to use fibrous materials for the data page. Document D1 actually taught that the rigidity of polycarbonate was a drawback. Hence, in the context of the objective technical problem considered, the skilled person would not have expected to lose any benefits by choosing a flexible material such as paper for the pages of the booklet. The security booklet of claim 1 was obvious.

The contested patent disclosed in paragraphs [0002] and [0003] that conventional security booklets such as passports comprised a cover foldable about an axis and a set of page sheets forming a book block stitched together about the axis. The end papers of the book block were bonded by adhesive to the cover. This was confirmed in paragraph [0012] of the patent which, through the term "*typical*", referred to the same prior art. According to paragraph [0002], there was an adhesive bond between the end papers and the cover, and one of the pages had personalised, i.e. identification,

data. According to paragraph [0003], the pages were made of fibrous material. Therefore, claimed features F1, F2, F3, F5 and F6 were all disclosed by the prior art acknowledged in the patent. Accordingly, only feature F4 was missing. The objective technical problem solved by this distinguishing features was to improve security of connection among pages against tampering. This problem was addressed in paragraph [0006] of document D1 which related to the same specific technical field and disclosed the same type of booklet structure. In paragraphs [0010], [0019] and [0022], document D1 taught that, for improving security of connection among pages against tampering, the arrangement of the page sheets of the booklet relied on a specific configuration wherein a data sheet was partially adhered to the cover. Contrary to the reasoning of the decision under appeal, the skilled person would have been prompted to apply this teaching to the conventional booklets mentioned in the patent, thus obtaining the claimed booklet including feature F4. The fact that document D1 disclosed a plastic data sheet was irrelevant because the booklet of the prior art acknowledged in the patent already had personalised security elements. Moreover, also the patent mentioned the arrangement of polycarbonate layers. Hence, the claimed security booklet would have been arrived at without exercising an inventive step.

- *Patent proprietor*

The subject-matter of claim 1 of the main request involved an inventive step.

Data sheet 4 of document D1 was not formed of a single fibrous sheet but comprised a sandwich structure. In contrast, feature F5 required each page sheet to be a



fibrous sheet. As described in paragraph [0005] of document D1, a significant drawback of prior art solutions was the high rigidity of the data sheet, making it subject to a breakage by fissuring or cracking when stressed by repeated and/or marked torsions and bendings. Furthermore, as described in paragraph [0006] of document D1, the rigidity made rather critical the connection modes for connecting the data sheet to the remaining parts of the booklet. Document D1 proposed a solution to these problems by providing a data sheet 4 made by a first 41 and a second 42 layer of polycarbonate and an intermediate layer of flexible material 43 interposed between the first and second layers and extending at least in correspondence of the longitudinal folding line. Compared to identification documents with rigid polycarbonate data pages, such structure provided increased flexibility in the area of the folding line. Thus, the provision of a flexible data sheet was the core idea of document D1. There had not been any incentive at all for the skilled person to replace the data sheet of document D1 with a single fibrous sheet. Especially, there was no hint to do so because document D1 already presented the skilled person a solution to overcome problems incurred by rigid data pages. The sheets 5 were only mentioned once in document D1, namely in paragraph [0031].

As regards the objection starting from the prior art mentioned in the patent, the following was noted. The point was not whether the skilled person could have arrived at the invention by modifying the prior art, but rather whether, in expectation of the advantages actually achieved they would have done so because of promptings in the prior art. Firstly, there was no teaching in document D1 that the security was improved

by partially adhering the data sheet to the cover. The partial adhesion was only mentioned in the context of the embodiment shown in Figure 1 of document D1. The skilled person would not have been incited to pick out that specific feature of the detailed description of document D1. Furthermore, by virtue of the plastic data sheet inserted between the cover and the paper sheets, document D1 presented a completely different structure compared to the conventional security booklets having a cover and a set of page sheets of fibrous material one of which was adhered to the cover as an end sheet. To assume that the skilled person would have amended the prior art mentioned in the patent by adhering the fibrous page sheet of the paper booklet that followed the end sheet on only one side to the end sheet had to be considered as an *ex post facto* reasoning. If any modification at all, the skilled person would have considered to insert the complete polycarbonate data sheet in a sandwich-structure into the booklet, according to the teaching of document D1.

## **Reasons for the Decision**

### *Admissibility of the patent proprietor's appeal*

1. Under Article 108, third sentence, EPC a statement setting out the grounds of appeal shall be filed within four months of notification of the decision in accordance with the Implementing Regulations. Rule 99(2) EPC provides that the appellant shall indicate in the statement of grounds of appeal the reasons for setting aside the decision impugned, or the extent to which it is to be amended, and the facts and evidence on which the appeal is based. If the appeal does not

comply with this provision, the board shall reject it as inadmissible (Rule 101(1) EPC).

2. In the decision under appeal issued on 1 August 2022, the opposition division decided to the detriment of the patent proprietor that the invention claimed in the main request was insufficiently disclosed and that there was an inconsistency between the wording of claim 1 and the description of the first auxiliary request (see points 2.4.8 and 3.6, respectively, of the Reasons).
3. The patent proprietor filed its statement of grounds of appeal ('statement') within the four-month time limit. It contains a first section ('I. Requests') summarising the patent proprietor's forty-three claim requests and a second section ('II. Substantiation') with arguments mainly on the (unchanged) main request and the forty-second auxiliary request filed as auxiliary request 40 with the statement.
4. In point II.1.b) of the statement, the patent proprietor put forward in the context of the main request that the appealed decision was based on an interpretation of claims 4 to 7 which did not consider the skilled person's interpretation. The alleged misinterpretation by the opposition division is then explained by analysing features F4 and F6 of claim 1 and referring to three drawings. Incidentally, these drawings are identical to the drawings of the sheet "figures as submitted with our letter of 25 June 2021" submitted at the oral proceedings before the board. In the next points II.c) and II.d), the statement contrasts the opposition division's interpretation with what the patent proprietor considered to be the "correct" interpretation of claims 1 and 4. In essence,

it is submitted that the opposition division's claim interpretation was wrong in the sense that the wording of claim 1 of the main request was not inconsistent with the embodiments of Figures 3 to 6 of the contested patent and that the expression "*further part*" of claim 4 actually corresponded to the expression "*another page*" of claim 1. Even if there were an inconsistency, so argued the patent proprietor, this could not be examined for compliance with the requirements of Article 84 EPC in view of decision G 3/14.

5. The board is satisfied that the patent proprietor's submissions made in the statement present the factual reasons why it held that the decision under appeal should be set aside. The submissions enabled the board to understand immediately, without first having to make investigations of its own, not only on what facts the patent proprietor based its arguments but also why it asserted that the decision in respect of the main request was incorrect. Moreover, by referring to Article 84 EPC and decision G 3/14, the statement also provided legal reasons why, in the patent proprietor's view, the opposition division arrived at the wrong conclusion in the decision under appeal in respect of the first auxiliary request.
  
6. Although the feature analysis of claim 1 in point II. 1.b) of the statement is to a large extent a literal repetition of what had been submitted in the reply to the notice for opposition, it cannot be held against the patent proprietor that it maintained its view on a crucial aspect of the case - here: the interpretation of the claims - and re-submitted some of the arguments it had already presented before the opposition division. Whether any such arguments are convincing or likely to be successful is irrelevant for the purposes

of determining the admissibility of the appeal (see also "Case Law of the Boards of Appeal of the European Patent Office", 10th Edition, July 2022, hereinafter "Case Law", V.A.2.6.2 and V.A.2.6.6).

7. Also the opponent's objection regarding a missing justification for submitting the new auxiliary requests on appeal is unconvincing. It is established case law that, if the admissibility requirements of Article 108, third sentence, EPC and Rule 99(2) EPC are fulfilled in respect of at least one request, the appeal as a whole will be admissible (Case Law, V.A.2.6.3.a)). There is no support in the EPC for a notion of 'partial admissibility' of an appeal. Whether a new claim request is admitted into the appeal proceedings under Articles 12 and 13 RPBA is a different question (Case Law, V.A.2.6.8). Having regard to the board's view on the reasoning provided above in respect of the main request and the first auxiliary request, it is immaterial for the purposes of admissibility of the present appeal whether or not sufficient reasons were presented in the statement for the further auxiliary requests, including the forty-second auxiliary request which was filed for the first time on appeal.
8. In view of the above, it must be concluded that the patent proprietor's statement of grounds of appeal provided reasons for setting aside the decision under appeal (Rule 99(2) EPC) so that the admissibility requirements of Article 108, third sentence, EPC are fulfilled.
9. The patent proprietor's appeal is admissible.

*Interpretation of the claim wording*

10. For a proper understanding of the present case, it is important to have a closer look at the claim wording and, in particular, at some of the terms used both in the claims and in the description of the patent as amended according to the main request.
  
11. Feature F3 of claim 1 requires that the security booklet has a set of "*page sheets*" stitched together along the axis about which they can be folded to define a set of "*pages*". The term *page* is used here to depict an individual *page leaf* of the booklet rather than the (recto or verso) side of a page leaf formed as the paper sheet is folded. This understanding finds confirmation in the use of reference signs 14A1 to 14E1 and 14A2 to 14E2 in Figure 1 and in paragraph [0041] of the contested patent.
  
12. Feature F4 introduces two different *parts* of one of the page sheets. A first part ("*one part*") is adhered to the cover of the security booklet. The first part may be an entire page of the page sheet or a smaller portion of the page sheet. Both alternatives are suggested in paragraph [0045] of the patent. But the first part of the page sheet must be situated "*laterally offset from the axis*", i.e. sideways from the folding (stitching) axis defined in features F2 and F3. As a consequence, it may not extend to the other side of the axis. Feature F4 also provides that a second part of the same page sheet ("*another part*") can be folded "*separately from the cover and the other pages about the axis*". This is understood to mean that the same page sheet has a further (undefined) portion that is not adhered to the cover but is free to move

about the folding axis with respect to the cover and the other page leaves of the booklet. No lateral offset is required for the second part.

13. Feature F5 presupposes that each of the page sheets defined in feature F3 and mentioned in feature F4 is formed of a "*single fibrous sheet*". The usual sense of this expression, which finds confirmation in paragraph [0020] of the patent, is that the sheet cannot be separated in different layers or sheets and that it is formed of fibres.
  
14. Feature F6 introduces a further element "*another page (10A1) of the set of pages*" with the constraint that it is "*adhered to another part of the cover (1) laterally offset from the axis (5)*", i.e. it is stuck fast to the surface of the cover in a different area compared to the first part of the first page sheet of feature F4. While feature F3 defines a "*set of pages*", no specific page (or page leaf) is mentioned in any of the features F1 to F5 of claim 1. Therefore, the question arises which page would be excluded by the "*another page*" of feature F6. From the syntax of the claim, the board understands this to be the page or pages of the first page sheet on which the different parts are defined in feature F4. Consequently, the "*another page*" is either a page of the first page sheet (as long as there is one left that neither contains the first nor second part of feature F4) or a page of a second page sheet of the set of page sheets introduced by feature F3. The board sees no basis for the opposition division's and the opponent's view that "*another page*" is to be read as "*another one of the page sheets*", i.e. excluding the entire page sheet of feature F4.

15. In claim 4 of the main request, a further part of *"said one page sheet"* is adhered to the cover of the security booklet. This is understood to be a reference to the first page sheet of feature F4 of claim 1. The adherence of the further part to the cover must take place *"on the opposite side of the axis (5) to the side to which said one part (41D) is adhered"*.

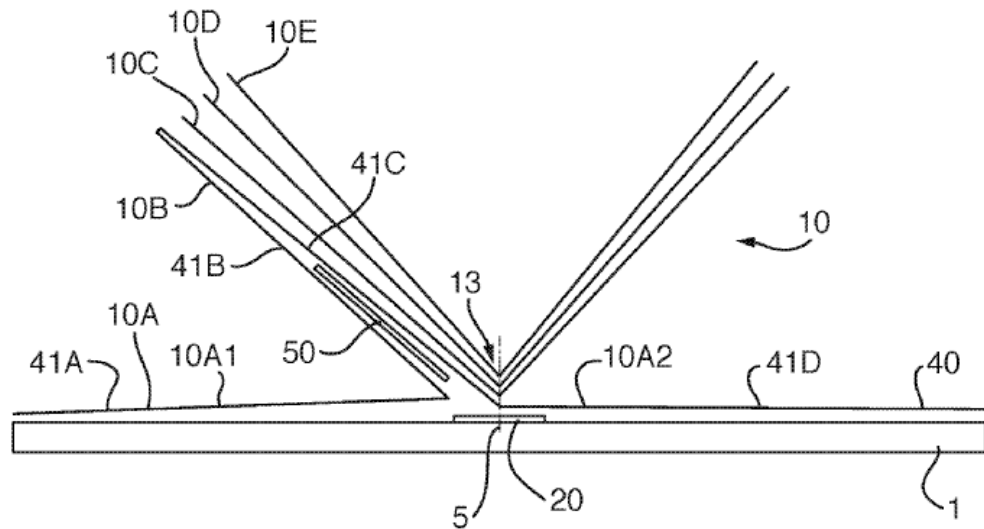
*Sufficiency of disclosure (Article 83 EPC)*

*(a) Objection against claim 1 in combination with claim 4*

16. In the embodiment of Figure 4 of the patent, a copy of which is reproduced below, the security booklet has a cover 1 with a folding axis 5 and a set of fibrous page sheets 10 stitched together along the axis. The page sheets 10C, 10D and 10E have similar size and each define two individual pages (in the sense of page leaves) at opposite sides of the axis 5. Unlike these page sheets, the outermost page sheet with reference sign 40 is folded in a concertina fashion. It comprises four pages 41A to 41D, two of which are adhered to the cover 1 at opposite sides of the axis 5. The other pages of page sheet 40 can be folded separately from the cover 1 about the axis 5. Thus, in the wording of claims 1 and 4, *"one part"* 41D of the page sheet 40 laterally offset from the axis 5 is adhered to the cover 1, *"another part"* 41C of the same page sheet can be folded separately from the cover and the other pages about the axis, while a *"further part"* 41A of the page sheet 40 is adhered to the cover laterally offset from the axis on the opposite side of the axis to the side to which the *"one part"* 41D is adhered.



Fig. 4



17. It is evident from Figure 4 of the patent that, compared to the pages leaves 41D and 41C defining the respective "one part" and "another part" of feature F4, page 41A defining the "further part" is another page of the same page sheet 40. Using the wording of the claims 1 and 4, the "further part" 41A is, thus, "another page of the set of pages" defined by the set of page sheets of feature F3. This reading of the embodiment shown in Figure 4 is in accordance with the first alternative identified in point 14. above). It is noted in this context that, in Figure 4, reference sign 10A1 used to depict the "another page" in claim 1 and reference sign 41A of the "further part" in claim 4 point to the same element.
18. On the basis of the above analysis, the board concludes that, contrary to the opposition division's view, the skilled person would be able to reproduce without undue difficulty a security booklet in accordance with the invention of claims 1 and 4 of the main request.

19. The opposition division's view was essentially motivated by its observation that the ambit of the combined claims 1 and 4 covered an embodiment that was nowhere described in the patent. The embodiment in question related to a security booklet where the "*another page*" and the "*further part*" formed separate elements (cf. point 2.4.7 of the decision under appeal). The board acknowledges that such an embodiment would indeed be difficult, if not impossible, to realise. Nevertheless, it is the board's view that the assessment whether the patent provides the skilled person with sufficient information to carry out an invention is a purely technical question that is separate from that of what reasonably falls within the ambit of claim wording (T 2773/18, Reasons 3.2). When assessing sufficiency of disclosure, the skilled person may rely on common general knowledge to supplement the information contained in the patent. In the present case, the above analysis of the embodiment of Figure 4 is proof that a potentially unworkable embodiment does not necessarily impair the skilled person to carry out the invention.
20. In the board's view, by citing a passage from section II.C.5.4 of the book "Case Law of the Boards of Appeal of the European Patent Office" (in its edition of July 2019), the opposition division misapplied case law developed in the field of chemistry for inventions that typically concern a composition having a compound or a parameter associated with a certain range of values (T 2773/18, Reasons 3.2; T 500/20, Reasons 3.6; T 447/22, Reasons 44). Incidentally, the board notes that this passage has its origin in Reasons 3.5 of decision T 409/91 where it is immediately followed by the cautionary statement "*However, the question whether the disclosure of one way of performing the invention*

*is sufficient to enable a person skilled in the art to carry out the invention in the whole claimed range is a question of fact that must be answered on the basis of the available evidence, and on the balance of probabilities in each individual case".* Apart from being situated in the field of mechanics, the facts of the present case are certainly very different from those of T 409/91. Instead, the present board concurs with T 500/20 that, in the field of mechanics, if claimed inventions do not involve ranges or compositions, basing an argument of insufficiency on the "*in the whole claimed range*"-approach is often inappropriate and can be rejected offhand. In such a case it normally suffices to provide a single detailed example or embodiment to illustrate how the invention can be put into practice, in such a way that the underlying principles can be understood by the relevant skilled person and they can reproduce the claimed invention using their common general knowledge without undue burden (T 500/20, Reasons 3.6).

21. The opponent argued that, even when applying the principles established by the case law in the field of mechanics, its conclusion of lack of sufficient disclosure would not change considering that none of the embodiments of the contested patent disclosed all features of the combined subject-matter of claims 1 and 4. The board disagrees. As set out above, the embodiment of Figure 4 of the patent illustrates how the security booklet of claims 1 and 4 of the main request can be put into practice. The fact that certain terms ("*another page*", "*further part*") are not used in a consistent manner in the claims may be a matter of clarity. Similarly, a contradiction between the claims and the embodiments of the description or the drawings of the patent based on a specific reading of the claims

would typically result in a lack of support by the description. Such objections need to be considered under Article 84 EPC, which in view of decision G 3/14 is not open for objection in opposition proceedings if, as in the present case, the contested claims are identical to claims of the patent as granted. This is not to say that a lack of clarity or support cannot result in an insufficient disclosure of the invention. However, in such a case it is necessary to show that the lack of clarity (or the lack of support by the description) affects the patent as a whole and that it is such that the skilled person - who can avail themselves of the description and common general knowledge - is hindered from carrying out the invention (T 2290/12, Reasons 3.1). This is not the case here.

22. Having regard to the above considerations, the requirements of Article 83 EPC are fulfilled in respect of claim 1 in combination with claim 4 of the main request. The same is then true for claims 5 to 7 of the main request, which immediately depend on claim 4.

*(b) Objection against claim 1*

23. The opponent takes issue with the opposition division's conclusion in point 2.4.1 of the reasons for the decision under appeal that the skilled person would be able to implement a page sheet formed of a single fibrous sheet without undue burden and without needing inventive skill.
24. The board agrees with the opposition division and the patent proprietor that paragraph [0020] of the contested patent provides sufficient details as regards the definition of the expression "*single fibrous sheet*" appearing in feature F5 of claim 1 of the main request.

It is irrelevant in the context of Article 83 EPC whether the wording of this feature is broader than the specific disclosure of paragraph [0020]. Furthermore, it is unclear how the lamination of two pages of one page sheet in the embodiments of Figures 3 and 5 (see the description in paragraphs [0049] and [0058] of the patent) can have an impact on the number of layers the single fibrous page sheet contains.

25. Therefore, the objection of insufficient disclosure in respect of claim 1 of the main request is unfounded.

*(c) Objection against claim 9*

26. The opponent's rejection of the opposition division's conclusion under point 2.4.3 of the reasons for the decision under appeal is essentially based on its view that the transparent or translucent plastic protective member of claim 9 of the main request is part of the "page" mentioned in claim 8 and, therefore, also of the "page sheet" of feature F4. Nevertheless, paragraphs [0030] and [0031] of the contested patent explain that the protective member is "*applied to the fibrous substrate layer*", either as a multilayer polymer laminate by means of a transfer process or as a self-supporting polymer layer using adhesive and/or heat sealing. The board fails to see how the skilled person would be prevented from putting the invention of claim 9 into practice.
27. The requirements of Article 83 EPC are fulfilled in respect of claim 9 of the main request.

*(d) Objection against claim 14*

28. The opponent contrasts the requirement of claim 14 (the thickness of the one page sheet is substantially uniform) with the statement in paragraph [0024] of the contested patent that "*at least 60 or 70% of the sheet will have the said uniform thickness*".
29. It is not clear how this statement would pose a hurdle to the skilled person when carrying out the invention. Either the term "*substantially*" is understood in the sense that the thickness does not vary along the page sheet (as suggested by the opponent). Or it is held to mean what is set out in paragraph [0024] of the patent, namely that the page sheet has a uniform thickness over at least 60% or 70% of the area of the sheet. Either way, it would be straightforward to produce the security booklet of claim 14. As regards the distribution of the thickness over the page sheet, paragraph [0047] of the contested patent refers to local reductions in thickness due to inclusions of watermarks and security windows. The board understands this to mean that, if watermarks or security windows are provided on the one page sheet, they should occupy no more than 40% of the area of the sheet.
30. Thus, the invention is sufficiently disclosed also in respect of claim 14 of the main request.

*(e) Objection against claim 17*

31. In the opponent's view, the meaning of the expression "*registered with*" in conjunction with the claimed booklet is so obscure that it cannot be carried out.

32. Paragraph [0035] of the contested patent explains in a general manner how the registering is done for page sheets folded in a concertina way. Concrete examples of registered security features are illustrated in Figures 7(A) to 7(C) and 8(A) to 8(C) (see also paragraph [0053] of the patent: "*in order to check that the required registration is present*").

33. Also here, the opponent's arguments are not convincing.

*(f) Conclusion on sufficiency of disclosure*

34. The requirements of Article 83 EPC are met.

*Added subject-matter (Article 123(2) EPC)*

35. In the proceedings before grant, the description of the application as filed was amended, *inter alia*, by deleting the following passage on page 3, lines 10 to 12.

*"In these structures, the other end page may be a separate sheet adhered to the cover although in a preferred construction another page of the set of pages is secured to another part of the cover to define the other end page. In this case,"*

Paragraph [0013] of the contested patent (which remained unamended in the main request) now starts with the words "*The another page could extend fully [...]*".

36. It is the opponent's case that, with the deletion of the above passage, any connection between the "*another page*" and the requirement that the set of pages were stitched as disclosed on page 1, lines 8 to 13 of the

application as filed (paragraph [0002] of the patent) was cancelled, thereby extending the subject-matter of claim 1 of the main request to include embodiments where the "*another page*" is not part of a stitched set of pages.

37. Originally, the security booklet of claim 1 was limited to features F1 to F5; there was no constraint on which page or page sheet was to be adhered to the "*another part of the cover*". In fact, the idea of using another page of the set of pages to accomplish that role (feature F6) was originally withheld in dependent claim 15. It is in this context that the passage deleted from the description must be read. By adding feature F6 to claim 1 in the proceedings before grant, the security booklet was limited to the effect that solutions in which a separate page or page sheet - not belonging to the stitched set of pages resp. page sheets of feature F3 (see point 14. above) - were adhered to another part of the cover were excluded. In the proceedings before grant, the original claim wording on page 1, line 33 to page 2, line 7 of the description was also replaced by the clause "*is defined in claim 1*" (see paragraph [0007] of the contested patent). In the board's view, a consequence of these amendments is that the expression "[t]he *another page*" at the beginning of paragraph [0013] of the patent must be understood as a reference to the wording of claim 1 as granted (which is identical in wording to claim 1 of the main request) as dictated by paragraph [0007]. The expression therefore implies the limitation of feature F6 and, by the same token, the requirement that it is part of a set of pages which belong to the stitched set of page sheets introduced in feature F3 (see point 14. above).



38. This view of the matter also takes cognisance of the fact that, by virtue of the expression "[i]n these structures", the passage deleted from paragraph [0013] of the patent made reference to the embodiments described in the preceding paragraphs. As the patent proprietor convincingly argued, the use of terms as "may be" and "preferred" in the deleted passage indicates that its content was optional. The arrangement of the "another page" as end page of the cover was therefore not closely linked with its implementation in a security booklet with a personalised sheet or with integrated security elements. This was also reflected by the claim structure of the application as filed.
39. Thus, the opposition division was correct in its assessment that the requirements of Article 123(2) EPC are fulfilled.

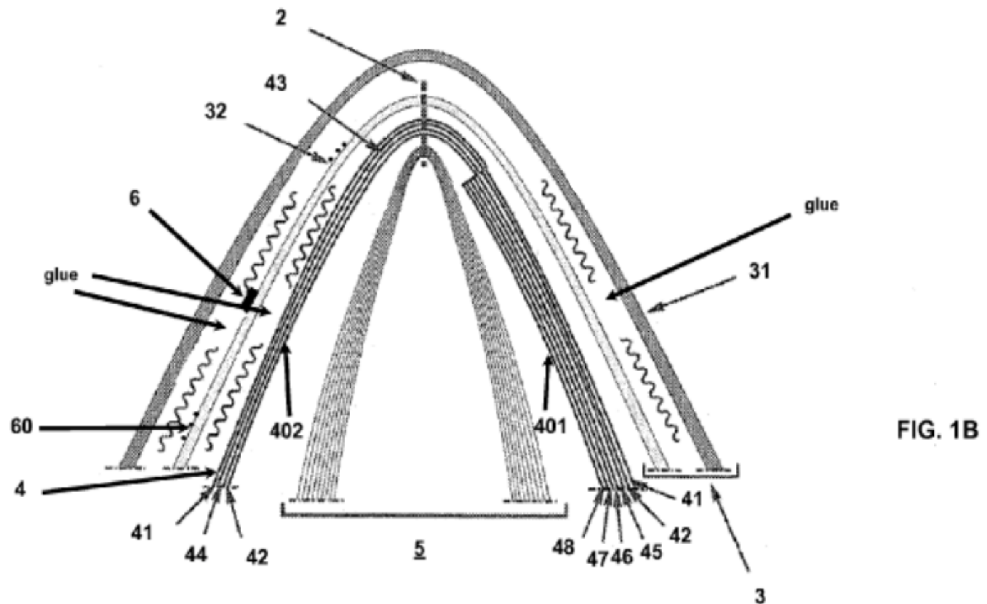
*Novelty over document D1 (Article 54(1) and (2) EPC)*

40. In point 3.4 of the reasons for the decision under appeal, the opposition division came to the conclusion that feature F5 was not disclosed by document D1 and, depending on what was considered to be the cover of the prior art security booklet, nor was feature F4 or feature F6.

*(a) Features F4 and F6*

41. The opponent's central argument is that the flyleaf sheet 32 of document D1 forms part of the book block rather than the cover, because it is stitched together with the other page sheets 4 and 5. In its view, the part of the flyleaf sheet 32 laterally offset from

connecting page 402 and shown at the right-hand side in Figure 1B of document D1 (reproduced below) can thus be considered "another page of the set of pages" in accordance with feature F6.



42. The board shares the opponent's view that the flyleaf sheet 32 of document D1 is a page sheet, just as the data sheet 4 and the internal sheets 5 are also page sheets of the security booklet. The fact that it is glued over its entire surface area to the external cover layer 31 through the intermediary of inlay 600 does not mean that it loses the property of being a page sheet. Moreover, the opponent makes a convincing case that the external cover layer 31, a separate fabric layer coupled to the rest of the booklet only at the last stage of the assembly (see Figures 2A to 3D of document D1, and their description in paragraphs [0038] to [0046]), can be considered as a cover in the sense of feature F2. The fact that document D1 labels the assembly of cover layer 31, inlay sheet 600 and flyleaf layer 32 as "cover sheet 3" does not take away the property of the cover layer 31 to cover the book block formed by the page sheets 32, 4, and 5.

43. According to paragraph [0018] of document D1, the flyleaf layer 32 is glued to the inner surface of the cover layer 31 via the intermediate inlay 600 which holds an embedded chip 6 and antenna 60. While the first page 401 of the page sheet 4 can be folded separately from the cover and the other pages about the stitching axis of the seam 2, the other page 402 of the page sheet 4 is glued to the flyleaf layer 32 (paragraphs [0020] and [0021]). This arrangement is similar to the way page 14B2 of page sheet 10B is "*adhered [...] onto the paper cover 1 via the Teslin Inlay 4*" (paragraph [0045]) in the embodiment of Figure 1 of the contested patent or to the way pages 41A, 41D are "*adhered [...] to the cover 1 via the Teslin Inlay 4*" (paragraph [0050]) in the embodiment of Figure 3. The board concludes that, despite the intermediate inlay and flyleaf layer, page 402 of document D1 is also adhered to the cover layer 31. As a consequence, feature F4 is disclosed by document D1.

44. The flyleaf layer 32 of document D1 is a page sheet stitched together with the other page sheets along the axis of the seam 2. It has left and right pages (in the sense of individual page leaves, see point 11. above), each of which is adhered to the cover layer 31 as an end page. Consequently, the page of the flyleaf layer shown at the right-hand side of Figure 1B of document D1 is "*another page*" in the sense of feature F6.

*(b) Feature F5*

45. The board is not persuaded that document D1 discloses in a direct and unambiguous manner that each page sheet of the security booklet shown in Figure 1B is formed of a single fibrous sheet. Page sheet 4 is a data sheet "*made of thin polycarbonate*" (paragraph [0019]). It

comprises "a first and a second polycarbonate (PC) layer, respectively 41 and 42, between which a third layer 43 made of flexible material, preferably of polyester, is interposed" (paragraph [0023]) in an area close to the seam (paragraphs [0023] and [0024]). The data sheet 4 comprises "a further intermediate filling layer 44" (paragraph [0025]) also "made of polycarbonate" (paragraph [0026]) as well as "further layers 45, 46, 47 and 48 [...] also made of polycarbonate" (paragraph [0027]). It may very well be that the different layers 41 to 48 of the data sheet are laminated in such a way to produce a single, inseparable page sheet. Yet it does not follow from document D1 that the sheet is formed of fibres (see point 13. above).

*(c) Conclusion on novelty*

46. The subject-matter of claim 1 of the main request is novel over document D1 (Article 54(1) and (2) EPC).

*Inventive step (Article 56 EPC)*

*(a) Starting from document D1*

47. It has been established under novelty, that the only distinguishing feature over document D1 is feature F5. In the context of the second auxiliary request, which had a claim 1 with identical wording as that of the main request, the decision under appeal proposed two different objective technical problems solved by feature F5. On the one hand, there was the problem derived from paragraphs [0010], [0012] and [0022] of the patent ("*improving the protection from tampering of such security booklets*"). On the other hand, a

formulation from the hand of the opponent was mentioned ("*improving the connection of the pages in a security booklet*"). The board notes that, in paragraphs [0010] and [0012] of the patent, the improvement of the anti-tampering properties is disclosed in the context of feature F4, not feature F5. Nevertheless, paragraph [0022] of the patent does establish a causal link between fibrous sheets, particularly those adhered to the cover of the security booklet, and an "*improved anti-counterfeit resistance*". Consequently, the board is satisfied that the objective technical problem can be formulated as improving the protection from tampering of security booklets.

48. Document D1 concerns security booklets with a page made of polycarbonate bearing ID data of a subject (paragraph [0001]). The data is preferably obtained by printing or laser engraving and can be provided with encrypted elements or authentication means such as holograms (paragraph [0002]). The polycarbonate page is sewn to the cover and/or the remaining pages (paragraph [0003]). The aim of the invention according to document D1 is to overcome the drawback that a polycarbonate page is highly rigid, making it subject to breaking when stressed by repeated torsions and bendings, and rendering the connection to the remaining parts of the booklet critical (paragraphs [0005] to [0007]). The solution proposed by document D1 is to interpose an intermediate layer of flexible material between first and second polycarbonate layers of the data sheet (paragraph [0010] and claim 1 of document D1). Based on this disclosure, the board shares the patent proprietor's view that the presence of a polycarbonate data sheet lies at the core of document D1. Therefore, it stands to reason that the skilled person would not have found any encouragement in the disclosure of

document D1 to do away with the polycarbonate data sheet and replace it by a fibrous sheet.

49. In a preferred embodiment of document D1, the flexible material of the intermediate layer is or comprises polyester (paragraph [0023] and claim 3 of document D1). Although polyester is often used in the form of fibres, nothing in document D1 indicates that this is the case for the intermediate layer. Furthermore, it has to be taken into account that, in the embodiment of Figure 1B, the intermediate layer 43 is but one of many layers. As described in paragraphs [0024] and [0025] of document D1, the layer 43 only extends in the area of the seam 2 and is supplemented by a filling layer 44 in order to compensate for the thickness. Further polycarbonate layers 45 to 48 are provided on the data page 401 of sheet 4 (paragraph [0027]). The board concludes that the data sheet is thus certainly not formed of fibres (see point 13. above). Even in the unlikely case that the skilled person had opted to extend the intermediate layer 43 beyond the seam area (and to dispose with the filling layer 44), they would not have had any incentive to replace any of the other layers 41, 42 or 45 to 48 by a material formed of fibres.

50. It follows that, when starting from document D1, the security booklet of claim 1 is not obvious.

*(b) Starting from the prior art mentioned in the contested patent*

51. In a further objection of lack of inventive step, the opponent starts from the prior art acknowledged in paragraphs [0002], [0003] and [0012] of the contested patent. According to the opponent, the only

distinguishing feature compared to such prior art is feature F4. The objective technical problem would be to improve security of connection among pages against tampering. It would have been obvious to solve this problem in view of teaching of document D1.

52. Paragraph [0002] of the patent mentions "*conventional security booklets such as passports*". It discloses that several page sheets are stitched together and form a book block that is joined to the cover "*by an adhesive bond between the end papers of the book block and the cover*". One of the pages is provided with personalised data. It is undisputed between the parties that the page sheets of the conventional passports mentioned in paragraph [0002] are made of paper, i.e. they are single fibrous sheets. The prior art security booklets of paragraph [0002] thus comprise features F1, F2, F3 and F5 of claim 1 of the main request. Furthermore, one of the end papers of the book block can be regarded as "*another page of the set of pages*" that is adhered to another part of the cover, in accordance with feature F6.
53. Whether or in how far paragraphs [0003] and [0012] of the patent and, especially, the specific prior art documents mentioned therein, relate to the same conventional booklets as those mentioned in paragraph [0002] is unclear. The opponent's arguments in this respect were unconvincing.
54. Starting from the conventional security booklets of paragraph [0002], the only distinguishing feature is thus feature F4. The board does not see any reason to deviate from the opponent's formulation of the objective technical problem, namely to improve security of connection among pages against tampering.

55. Though the opponent's view is not shared that the objective technical problem is addressed in paragraph [0006] of document D1, this prior art document undisputedly lies in the technical field of security booklets and would, therefore, have been under consideration by the skilled person when attempting to find a solution to the objective technical problem. Nevertheless, document D1 does not concern the same type of booklet structure as that of the conventional security booklets. As set out in point 48. above, the personalised data in document D1 is provided by a multilayer data sheet which is essentially made of polycarbonate with an intermediate polyester layer interposed in the area of the seam. In addition, the only mention of *tampering* in document D1 is in paragraph [0012] in respect of an RFID chip integrated in the cover with the aim to check matching data recorded on a chip integrated in the polycarbonate data sheet. The board is therefore not convinced that, from amongst the various key features disclosed in document D1, the skilled person would have been prompted to select the teaching in respect of the partial adhesion of a page sheet to the cover. Renouncing to the composition and material of the page sheet and ignoring the fact that it bears a chip with recorded personalised data coupled to an RFID chip integrated in the cover would be at odds with what the skilled person would have done in realistic situations when attempting to solve the objective technical problem.
56. Therefore, the board is not convinced that the claimed security booklet is obvious when starting from the prior art acknowledged in the contested patent.



*(c) Conclusion on inventive step*

57. In view of the above, the subject-matter of claim 1 of the main request involves an inventive step (Article 56 EPC).

## Order

### For these reasons it is decided that:

1. The patent proprietor's appeal is admissible.
2. The decision under appeal is set aside.
3. The case is remitted to the opposition division with the order to maintain the patent as amended on the basis of the following documents:
  - claims 1 to 19, filed as main request with the patent proprietor's statement setting out the grounds of appeal;
  - description paragraphs [0001] to [0010] and [0012] to [0061] of the patent specification;
  - drawings: Figures 1 to 8(C) of the patent specification.

The Registrar:

The Chairman:



N. Schneider

P. Lanz

Decision electronically authenticated