## PATENTAMTS

### BESCHWERDEKAMMERN BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPÉEN DES BREVETS

#### Internal distribution code:

- (A) [ ] Publication in OJ
- (B) [ ] To Chairmen and Members
- (C) [ ] To Chairmen
- (D) [X] No distribution

#### Datasheet for the decision of 10 June 2022

Case Number: T 1317/19 - 3.4.03

06808021.7 Application Number:

Publication Number: 1945467

B42D25/00, B42D13/00 IPC:

Language of the proceedings: EN

#### Title of invention:

INFORMATION PAGE

#### Patent Proprietor:

Gemalto Oy

#### Opponent:

Bundesdruckerei GmbH

#### Relevant legal provisions:

EPC Art. 52(1) EPC 1973 Art. 54(1), 54(2), 56 RPBA 2020 Art. 13(2)

#### Keyword:

Novelty - main request - (no) Amendment after summons - exceptional circumstances (no) Inventive step - patent as maintained by opposition division -(no)



# Beschwerdekammern Boards of Appeal

Chambres de recours

Boards of Appeal of the European Patent Office Richard-Reitzner-Allee 8 85540 Haar GERMANY Tel. +49 (0)89 2399-0

Fax +49 (0)89 2399-4465

Case Number: T 1317/19 - 3.4.03

DECISION
of Technical Board of Appeal 3.4.03
of 10 June 2022

Appellant: Gemalto Oy

(Patent Proprietor) Myllynkivenkuja 4 01620 Vantaa (FI)

Representative: Lotaut, Yacine Diaw and Bricks, Amélie Thales Dis France SA

Intellectual Property Department

6, rue de la Verrerie 92190 Meudon (FR)

Appellant: Bundesdruckerei GmbH (Opponent) Kommandantenstrasse 18 10969 Berlin (DE)

Representative: Bittner, Thomas L.

Boehmert & Boehmert Anwaltspartnerschaft mbB Pettenkoferstrasse 22 80336 München (DE)

Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on

1 March 2019 concerning maintenance of the European Patent No. 1945467 in amended form.

#### Composition of the Board:

Chairman M. Papastefanou

Members: M. Ley

G. Decker

- 1 - T 1317/19

#### Summary of Facts and Submissions

- I. The appeals were filed by the appellant-patent proprietor (hereinafter: "the proprietor") and the appellant-opponent (hereinafter: "the opponent") against the interlocutory decision of the opposition division finding that, on the basis of auxiliary request 3 filed during the oral proceedings on 12 October 2018, the patent in suit (hereinafter: "the patent") met the requirements of the EPC.
- II. Reference is made to the following document:

D1 EP 1 502 765 A1

- III. The patent was opposed under Article 100(c) EPC 1973, Article 100(b) EPC 1973 and Article 100(a) EPC 1973, the latter provision on the grounds of lack of novelty (Articles 52(1) EPC, 54(1) and (2) EPC 1973, Article 54(3) EPC) and of lack of inventive step (Article 56 EPC 1973).
- IV. In the contested decision, the opposition division held inter alia that the subject-matter of claim 1 according to the main request was not novel over D1 (Article 54(1) and (2) EPC 1973), and that the subject-matter of claim 1 of the first auxiliary request then on file was novel over D1, but lacked an inventive step (Article 56 EPC 1973) over D1 as the closest prior art and the common general knowledge of the skilled person. A second auxiliary request filed during the oral proceedings before the opposition division was not admitted into the opposition proceedings.

- 2 - T 1317/19

V. At the end of oral proceedings before the board, the proprietor requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of the claims according to the main request underlying the decision under appeal or, alternatively, according to the first auxiliary request filed during the oral proceedings before the board on 10 June 2022.

The opponent requested that the decision under appeal be set aside and that the patent be revoked.

- VI. Claim 1 according to the proprietor's main request has the following wording (feature labelling by the opposition division):
  - 1) An information page (1) of a security document, comprising:
  - **1a)** an information part (3) with an upper and a lower surface
  - **1b)** and a layer-structure or a one-piece structure between the upper and lower surface,
  - 1c) on the upper or lower surface of which at least a part of the information recorded on the information page (1) can be seen; and
  - 1d) a flexible connecting part (2) for attaching the information page to a security document,
  - 1e) with good bending strength
  - 1f) the connecting part (2) having a net-like structure
  - 1g) and being attached to the information part (3) in an area of a seam (4), characterized in that
  - 1h) the connecting part is laminated to penetrate into the information part (3) in the immediate vicinity of the upper or lower surface of the information part such that the netlike structure of the connecting part (2) sinks into the material of the upper or lower surface

- 3 - T 1317/19

of the information part (3) in the area of the seam (4) and visible marks are left on the upper or lower surface of the information part if a forger breaks the seam by cutting in order to detach the information part from the connecting part.

In claim 1 according to the proprietor's first auxiliary request, features 1f) and 1h) have the following amended wordings:

- 1f') the connecting part (2) having a net-like structure comprising threads
- 1h') the connecting part is laminated to penetrate into the information part (3) in the immediate vicinity of the upper or lower surface of the information part such that the netlike structure of the connecting part (2) sinks into the material of the upper or lower surface of the information part (3) in the area of the seam (4) and visible marks are left on the upper or lower surface of the information part if a forger breaks the seam by cutting in order to detach the information part from the connecting part and attaches the individual threads of the connecting part to another information part.

Claim 1 as maintained by the opposition division corresponds to the main request, wherein feature 1b) has the following amended wording:

**1b')** and a layer-structure or a one-piece structure between the upper and lower surface

and wherein the following feature is added after 1h):

- 4 - T 1317/19

1i) in that the netlike structure of the connecting part (2) comprises threads that form an angle of about 45° with a seam (4) of the information part (3) and the connecting part (2).

#### Reasons for the Decision

- 1. Both appeals are admissible.
- 2. The invention relates to an information page of a security document, such as a passport.

According to paragraph [0002] of the patent, the requirements for the properties of an information page of a security document are partly conflicting. Firstly, the information part of an information page, in which information of the information page is recorded, must have such a structure that a forger cannot disassemble it. A further prerequisite is that at least part of the information of the information page can be recorded on the information page by means of laser engraving. To achieve these aims, the information part must, in practice, be manufactured of material having poor bending properties and bending strength. However, good bending properties and bending strength are expected of an information page in order for it to be attached to a security document in a way corresponding to that used for other pages of the document. Thus, there is a need to attach a flexible connecting part with good bending strength to the information part, via which the information page is joined to the security document. To achieve sufficient safety level, the information part of the information page must be joined to the connecting part in such a way that detaching these two from each other is not possible without there being visible marks left.

- 5 - T 1317/19

According to the claimed invention, this is achieved by laminating the connecting part to penetrate into the information part in the immediate vicinity of the upper or lower surface of the information part such that the netlike structure of the connecting part sinks into the material of the upper or lower surface of the information part in the area of a seam. Visible marks are left on the upper or lower surface of the information part if a forger breaks the seam by cutting in order to detach the information part from the connecting part, see also paragraph [0017] of the patent. According to paragraph [0004], this provides a solution that makes it difficult to detach the information part and the connecting part of an information page from each other without there being visible traces left.

- 3. Proprietor's main request
- 3.1 The opposition division held that the example of figure 5 of D1 disclosed all the features of claim 1, see pages 10 and 11 of the impugned decision. Each of the layers 18 (D1, [0025], "Datenträger 18") was an information part with a one-piece structure. Textile layer 7 was a flexible connecting part with a netlike structure sinking into the material of the information part 18 during lamination. The opposition division considered that an information part connected to a netlike structure as disclosed in D1 and having identical technical features to the information part defined in claim 1 would inevitably show marks when cut.
- 3.2 According to the proprietor, the term "upper or lower surface of the information part" in feature 1h) was to

- 6 - T 1317/19

be understood as a "free outer surface", see figures 3 and 4 and paragraphs [0013], [0016] or [0017] of the patent, which the connecting part protrudes from or the connecting part can be seen on. This was the case for a layer-structured or a one-piece structured information part, see paragraph [0013], [0016], figures 3 and 4 of the patent.

D1 disclosed two embodiments, namely a first embodiment wherein the flexible layer comprising openings was integrated between two outer data carriers containing the data intended for personalisation, i.e. the information part (see figures 1 to 6, figure 8, paragraph [0010], second sentence, paragraph [0011], first alternative, paragraphs [0020] to [0025]), and a second embodiment wherein the data carrier formed an inner layer between two flexible layers (see figures 9 and 10, paragraph [0010], second to last sentence, paragraphs [0027] to [0030]).

For the proprietor, the opposition division held that in the example of figure 5 in D1 the opposite site of the flexible layer was free (without any second data carrier). This configuration was not disclosed in D1. In the first embodiment, as shown in figure 5, two data carriers 18 were necessarily present to provide an irremovable connection and no free surface was present. Paragraph [0020] of D1 suggested that only one data carrier was conceivable. In that case, however, a layer without data ("Schicht ohne Daten") was needed.

Thus, the subject-matter of claim 1 differed from D1 in that the connecting part (said "flexible layer" in D1) was laminated to a <u>free outer surface</u> of the layer-structure or one piece-structure of the information part, and not, as shown in D1, integrated between two

- 7 - T 1317/19

data carriers (or a data carrier and a layer without data) and therefore laminated to an <u>inner surface</u> of each of these two data carriers sandwiching this flexible layer therebetween so as to provide an inseparable connection.

Moreover, according to paragraphs [0001], [0005], [0011], [0012] and [0017] of the patent, the visible marks according to feature 1h) were left after a forger had detached by cutting the information part from the connecting part and attached the individual threads of the connecting part to another information part. This important aspect was not disclosed in D1. With respect to the first sentence of paragraph [0017], the proprietor argued that it referred to an embodiment of the invention where the connecting part was covered by a portion of material of the information part, said portion being so thin that the connecting part could still be seen, even after re-attaching the connection part in a forgery attempt.

In summary, according to the proprietor, D1 did not disclose feature 1h).

Finally, the proprietor also stated that D1 did not disclose an information part with a layer-structure according to the first alternative of feature 1b). Paragraph [0013] of the opposed patent made it clear that a structure formed of multiple layers, i.e. a "multilayer structure", was meant. A chip as disclosed in D1 was not a layer.

3.3 The opponent pointed out that the wording of claim 1 did not require the connecting part being laminated onto a free outer surface of the information part.

- 8 - T 1317/19

According to claim 1, the connecting part was laminated to penetrate into the information part in the immediate vicinity of the upper or lower surface of the information part. Additional layers on said surface were not excluded.

Figures 1 to 5 of D1 disclosed netlike structures 3b, 4b, 5b, 6b, 7b laminated onto a surface of information parts 9, 11, 13, 14 and 18. Moreover, the netlike structures in D1 sank into the material of the information parts so that, as a direct and inevitable consequence, visible marks were left if a forger broke the seam by cutting in order to detach the information parts from the connecting portion. The opponent pointed out that the wording of claim 1 did not require that visible marks were left only after a forger attached the connecting portion of another information part or that said visible marks were on an free outer surface. According to claim 1, visible marks were left in D1 by breaking the seam using cutting.

In summary, according to the opponent, D1 disclosed feature 1h).

The opponent also added that the term "layer-structure" in feature 1b) or "Schichtstruktur" included an information page made of one single layer, as the one known from D1.

- 3.4 The board shares the opposition division's view on the disclosure of D1.
- 3.4.1 D1 discloses an information page (2, [0002], "Datenseite") of a security document ([0019], "Ausweis", "Pass"), comprising:

an information part (9, 9a, 9b, 11, 11a, 11b, 13, 13a, 13b, 14, 14a, 14b, 18, 18a, 18b, [0020], [0025],
"Datenträger") with an upper and a lower surface and a layer-structure or a one-piece structure between the upper and lower surface (figures 1 to 5), on the upper or lower surface of which at least a part of the information recorded on the information page can be seen ([0019], [0020], "Daten 28 und 29"); and a flexible connecting part (3, 4, 5, 6, 7, [0020], "flexible Schicht") for attaching the information page to a security document, with good bending strength ([0025]); the connecting part having a netlike structure ([0009], [0010], [0021], [0025]) and being attached to the information part in an area of a seam (figures 1 to 5).

3.4.2 In D1, each of the data carriers 9a, 9b, 11a, 11b, 13a, 13b, 14a, 14b, 18a, 18b can be considered an information part having "a one-piece structure" in the sense of claim 1, irrespective of whether or not the information page of D1 comprises in addition a further layer (with or without information), see paragraph [0020] of D1.

The board agrees with the opponent that the term "layer structure" used in claim 1 encompasses information parts formed by a single layer of material ("... eine schichtförmige Struktur oder Form [...], die von einer einzelnen Schicht gebildet ist.", see the opponent's letter of 6 November 2019, point B.3.3). Thus, each of the data carriers 9a, 9b, 11a, 11b, 13a, 13b, 14a, 14b, 18a, 18b can also be considered an information part having "a layer structure". Moreover, D1 discloses information parts ("Datenträger") formed by a plurality of layers, see [0016], "Der Datenträger kann [...] ein elektronisches Bauteil, insbesondere einen Chip

- 10 - T 1317/19

enthalten", and [0020], "Der Chip 42 ist in einem Datenträger 9 angeordnet, insbesondere einlaminiert". Even if the chip 42 itself might not be necessarily considered a layer, the term "einlaminiert" indicates that the chip is between two sub-layers of an information part, as shown e.g. on figures 10 of D1 and described in paragraph [0028]. Thus, D1 discloses multi-layer informations parts.

In other words, D1 discloses both alternatives of feature 1b).

3.4.3 In D1, the connecting part (3, 4, 5, 6, 7) is laminated ([0011], "Laminieren") to penetrate into the information part (one of the "Datenträger" 9a, 9b, 11a, 11b, 13a, 13b, 14a, 14b, 18a, 18b) in the immediate vicinity of the upper or lower surface of the information part (said one of the "Datenträger" 9a, 9b, 11a, 11b, 13a, 13b, 14a, 14b, 18a, 18b) such that the netlike structure of the connecting part sinks into the material of the upper or lower surface of the information part in the area of the seam (figures 1 to 5).

Contrary to the proprietor's view, although figures 3 and 4 of the patent show a connecting part 2 at a free outer surface of an information part 3, claim 1 does not require that the information page includes an information part with a "free outer surface". As pointed out by the opponent, additional information parts or other elements are not excluded by the wording of claim 1. The first sentence of paragraph [0017] of the patent explicitly states that the connecting part can be completely embedded within the material of the information part. This would also indicate that the netlike structure is not visible on the surface of the

information part, i.e. that the netlike structure is not laminated onto a "free outer surface" of the information part.

- 11 -

Hence, the term "in the immediate vicinity of the upper or lower surface of the information part" does not imply that the connecting part or the visible marks are positioned at or on a free outer surface of the information part.

3.4.4 The board does not share the opponent's view that the term "if a forger breaks the seam by cutting in order to detach the information part from the connecting part" defines a method or process step. It relates to a condition that, when met, implies visible marks on the information part. The cutting itself is sufficiently defined in claim 1, which merely requires that said cutting breaks the seam and detaches the information part from the connecting part. According to paragraph [0006], the cutting could be in the material of the information part and thus break the information part. The board notes that the figures shown on page 8 of the opponent's statement of the grounds of appeal show a cutting line that does not break the seam (4) in order to detach the information part (5, 6) from the connecting part (2), but merely breaks the information part (5, 6) without breaking the seam (4). According to the board's understanding, these cutting lines do not correspond to what is meant by feature 1h).

Thus, according to feature 1h), the connecting part is laminated to penetrate into the information part in the immediate vicinity of the upper or lower surface of the information part such that the netlike structure of the connecting part (at least partly) sinks into the material of the upper or lower surface of the

- 12 - T 1317/19

information part in the area of the seam, the "seam" being the area where the connecting part is attached to the information part, see feature 1g) of claim 1 and figures 2 and 4 of the patent. If a forger breaks said seam by cutting in order to detach the information part from the connecting part, visible marks are left on the upper or lower surface of the information part, said visible marks being e.g. parts of the netlike structure that penetrated or sank into the material of the upper or lower surface of the information part, see paragraph [0012], [0016], [0017] of the patent. As pointed out by the opposition division and the opponent, the visible marks are the inevitable result ("zwingende Folge", see the opponent's letter of 6 November 2019, point B.2.2 b)) of the structural features of the claimed information page, see the impugned decision, page 8, last paragraph.

There is, however, no indication in claim 1 that the visible marks should be visible only after reconnecting or re-attaching the connecting part to another information part in a forgery attempt. In the board's understanding, the visible marks are a direct consequence of the cutting. Paragraphs [0001], [0005], [0011], [0012] and [0017] of the patent merely make it clear that, after cutting, attaching another information part to the original connecting part without there being said visible marks is "very difficult in practice".

In D1, visible marks are left on the upper or lower surface of the information part if a forger breaks the seam by cutting in order to detach the information part from the connecting part of figures 1 to 5. Whether they will still remain visible after a skilful forger

- 13 - T 1317/19

has re-attached the connecting part to another information part, is not relevant.

The argument of the proprietor that D1 aimed at an "irremovable connection" is not found convincing, because it is not foreseen to provide a removable connection for the claimed information page, either.

3.4.5 In view of sections 3.4.3 and 3.4.4 above, D1 discloses an information page with feature 1h).

Thus, the subject-matter of claim 1 according to the main request lacks novelty over D1 (Article 52(1) EPC, Article 54(1) and (2) EPC 1973).

- 4. Proprietor's first auxiliary request admission
- 4.1 As a justification for the late filing of the first auxiliary request, the proprietor stated that it was only during the oral proceedings on 10 June 2022 that it had understood the reasons why feature 1h) was held to be disclosed in D1. The amendments made to feature 1h) were necessary to clarify that the "visible marks" were left after a forger had attached the individual threads of the connecting part to another information part, as disclosed e.g. in paragraphs [0001], [0005], [0011], [0012] and [0017] of the patent. The proprietor argued that it consistently maintained its view during the examination, opposition and appeal proceedings that feature 1h) of claim 1 already implied that visible marks were left after re-attaching the connecting part and that therefore the subject-matter of claim 1 was new over D1. Reference was made to the proprietor's statement setting out the grounds of appeal, page 2/12, penultimate paragraph, to the proprietor's letter dated 3 August 2018, page 5/7, last paragraph, the

- 14 - T 1317/19

proprietor's letter dated 29 May 2016, section 2.2.1 and to the proprietor's letter dated 14 August 2015, page 2, first and second full paragraphs.

- The opponent argued that there was no change in the discussion on the interpretation of the terms "upper or lower surface" or "visible marks" of feature 1h) in claim 1. It noted that the amendments made to claim 1 did not specify that a "free outer surface of the information part" was meant and that the amendments made to claim 1 introduced subject-matter not complying with Articles 123(2) EPC and 84 EPC 1973.
- According to Article 13(2) RPBA 2020, which is to be applied pursuant to Article 25(1) RPBA 2020, any amendment to a party's appeal case made after notification of a summons to oral proceedings "shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned".

The board cannot acknowledge exceptional circumstances in the present case. The issues as to how feature 1h) was to be understood, and whether it was disclosed in D1, were discussed throughout the opposition proceedings, in the parties' statements setting out their grounds of appeal and in the board's communication pursuant to Article 15(1) RPBA 2020 informing the parties about the board's preliminary opinion. As pointed out by the proprietor, its view as to how feature 1h) and document D1 should be understood remained unchanged during the examination and opposition proceedings, but was not followed by the opposition division. The board, therefore, sees no exceptional circumstances that could justify the filing

- 15 - T 1317/19

of the first auxiliary request at such a late stage of the proceedings.

The first auxiliary request is thus not taken into account in the appeal proceedings (Article 13(2) RPBA 2020).

- 5. Patent as maintained by the opposition division
- 5.1 Feature 1i) is the only feature distinguishing claim 1 from D1. It is not disputed by the parties that D1 includes a network with threads and that D1 does not disclose which angles some or all of these threads form with the seam, the "seam" being the area where the connecting part is attached to the information part.
- 5.2 The opposition division held that feature 1i) solved the technical problem of improving the bending properties of the netlike structure and acknowledged an inventive step based thereon. The opposition division concluded that the patent was to be maintained on the basis of the third auxiliary request then on file.
- In its statement setting out the grounds of appeal, the opponent referred to paragraph [0015] of the patent and considered that the objective technical problem solved by feature 1i) was to make the bending properties of the connecting part "as good as possible". It would have been obvious for the skilled person to use the angle of 45° in order to obtain an uniform distribution of tension during bending ("so dass die Spannungsverteilung gleichmäßig ist", see the opponent's statement of grounds of appeal, page 18, third to last paragraph).

During the oral proceedings before the board, the opponent argued that feature 1i) required that the netlike structure comprised at least two threads that form an angle of 45° with a seam and that it was questionable whether visible marks according to 1h) were obtained with only two threads. Paragraph [0015] mentioned a number of 15 threads per cm, but this number was not claimed. D1 already mentioned that the flexible layer 3 could be a "woven fabric" or "tissue" ("Gewebe"). Starting from D1, the objective technical problem would be to implement the connecting part. It would have been obvious for the skilled person using their common general knowledge to select an angle of 45° between the direction of the seam and at least two threads of the connecting part.

5.4 The proprietor argued that the skilled person would have understood the term "threads" of feature 1i) as a number of threads largely greater than two. Paragraph [0001] or [0011] of the patent mentioned that it was essential to the invention that the network had a sufficient number of individual "threads", the attaching of which to each other without visible marks in connection with attempted forgery becoming as difficult as possible. Paragraph [0015] gave as an example a number of 15 threads per cm. Such a number of threads was "high enough" to obtain a connecting part with an "improved bending strength thanks to the angle of 45° between these threads and the seam direction" (see the proprietor's letter of 9 May 2022, first three lines of page 11).

According to the proprietor, the distinguishing feature solved "the technical problem of improving the resistance to bending of the connecting part of a security document forming a seam with an information

- 17 - T 1317/19

part of that document" (see the proprietor's letter of 9 May 2022, page 11, fourth to last paragraph). This formulation of the objective technical problem was not in contradiction with feature 1e) that required a "good bending strength". The skilled person would have wished to improve both properties even if they were conflicting. Starting from D1 and willing to achieve such an improvement, the skilled person would have not modified the flexible layer of D1 such that feature 1i) was obtained. The skilled person would not have turned to any prior art documents at hand when searching for a way to strengthen the connecting part of a security document against bending. Therefore, the skilled person, when searching for a way to improve the resistance of a netlike structure forming a seam with an information page against bending along a direction of this seam, would find no teaching of a solution to this problem.

- As pointed out by the board in its preliminary opinion, as well as by the opponent, claim 1, with the current formulation of feature 1i), encompasses an information page with a netlike structure having threads, wherein only two of said threads form an angle of 45° with the seam; the seam mentioned in feature 1i) being the same as defined by feature 1g). However, it is at least questionable whether this configuration would have any impact on the bending strength or the mechanical properties of the connecting portion 3 of D1 at all, and whether an inventive step could then be acknowledged on the basis of feature 1i).
- 5.6 Even if it is assumed that the claimed network had a (sufficiently) high number of threads largely greater than two, the subject-matter of claim 1 lacks an

- 18 - T 1317/19

inventive step with respect to D1 for the following reasons.

Flexible layer 3 in figures 1 to 5 of D1 is classed as a textile or woven fabric ("Gewebe"), see e.g. paragraphs [0010], [0021], [0022], [0024]. As it is generally known, this implies that the netlike structure is made by interlacing two or more threads at right angles to one another (the most common - if not standard - way to weave a fabric) and that the total number of threads is sufficiently high to obtain the desired mechanical properties, e.g. its flexibility.

The board does not concur with the proprietor's formulation of the objective technical problem ("improving the resistance to bending of the connecting part") provided in its letter dated 9 May 2022 and repeated during oral proceedings. There is no indication in the patent that it would be the object of the invention to improve (i.e. to increase) the resistance of a netlike structure against bending, i.e. to strengthen the connecting part of a security document against bending. Rather on the contrary, paragraphs [0002] and [0015] make it clear that the flexible connecting part should have good bending properties and a good bending strength, see also feature 1e) in claim 1. A good bending strength implies, for example, that the connecting portion can be bent many times without breaking. There is no hint in the patent that it might be an object of the invention to modify the connecting part such that bending becomes more difficult, as argued by the proprietor. Stating that the technical effect provided by the claimed angle of  $45\,^{\circ}$  is to make bending more difficult is, in the board's view, in contradiction with the patent specification. The board therefore

- 19 - T 1317/19

opines that the proprietor's formulation of the objective technical problem is not accurate.

Regarding the opponent's initial formulation of the objective technical problem ("to make the bending properties of the connecting part as good as possible"), the board notes that this aspect is mentioned in paragraph [0015] for a number of 15 threads per cm, as also pointed out by the opponent. Neither this specific number of threads nor the specific material and thickness of the connecting portion, all mentioned in paragraph [0015], are part of claim 1. The board has doubts that a skilled person would conclude from this passage that distinguishing feature 1i) alone would result in optimised ("as good as possible") bending properties.

Hence, the board is of the view that feature 1i) merely provides an alternative implementation of the netlike structure so that this is a more appropriate formulation of the objective technical problem. It is known to the skilled person that any orientation (0° to 90°) of the threads with respect to the seam is possible in D1. Modifying the connecting part in D1 such that more than two threads form an angle of 45° with the seam is thus an obvious choice for the skilled person wishing to solve the objective technical problem, especially since no particular technical effect from this specific angle is apparent.

Hence, the subject-matter of claim 1 is obvious in view of D1 and the common general knowledge of the skilled person, contrary to the requirements of Article 56 EPC 1973.

- 20 - T 1317/19

6. As no allowable request is on file, the patent must be revoked.

#### Order

#### For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked.

The Registrar:

The Chairman:



B. Atienza Vivancos

M. Papastefanou

Decision electronically authenticated