

Internal distribution code:

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

**Datasheet for the decision
of 14 January 2020**

Case Number: T 1525/15 - 3.2.05

Application Number: 00940748.7

Publication Number: 1187716

IPC: B31F1/07

Language of the proceedings: EN

Title of invention:

Embossing method for the production of multi-ply web material,
and product made in this way

Patent Proprietor:

FABIO PERINI S.p.A.

Opponents:

Paper Converting Machine Company
SCA TISSUE FRANCE

Relevant legal provisions:

EPC 1973 Art. 54, 56, 83, 84
EPC Art. 123(2)

Keyword:

Clarity (yes)

Added matter (no)

Novelty (yes)

Inventive step (yes)

Decisions cited:

G 0001/03, G 0002/10, G 0001/16

Catchword:

Implicitly disclosed disclaimer (see point 4 of the reasons)



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 1525/15 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 14 January 2020

Appellant: SCA TISSUE FRANCE
(Opponent 2) 151-161, boulevard Victor Hugo
93400 Saint-Ouen (FR)

Representative: Gevers & Orès
41, avenue de Friedland
75008 Paris (FR)

Respondent: FABIO PERINI S.p.A.
(Patent Proprietor) Via per Mugnano
55100 Lucca (IT)

Representative: Michele Mannucci
Ufficio Tecnico Ing.A. Mannucci
Via della Scala 4
50123 Firenze (IT)

Party as of right: Paper Converting Machine Company
(Opponent 1) 2300 South Ashland Avenue
Green Bay WI 54304 (US)

Representative: Hans Edvard Ruschke
Ruschke Madgwick Seide & Kollegen
Postfach 86 06 29
81633 München (DE)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
29 May 2015 concerning the maintenance of
European patent No. 1187716 in amended form.**

Composition of the Board:

Chairman	M. Poock
Members:	O. Randl
	C. Brandt
	S. Bridge
	C. Josefsson

Summary of Facts and Submissions

- I. Opponent 2 filed an appeal against the decision of the opposition division on the amended form in which European patent No. 1 187 716 ("the patent") could be maintained.

The opposition division was of the opinion that claims 1 and 7 of the patent as granted (main request) did not comply with the requirements of Article 123(2) EPC but that the first auxiliary request complied with the requirements of the EPC.

Of the prior art documents taken into account by the opposition division, documents WO 99/44814 ("D1") and WO 97/27365 ("D5") are particularly relevant for the appeal proceedings.

- II. On 23 November 2018 the parties were summoned to oral proceedings to be held on 5 November 2019.
- III. In its communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA) issued on 10 May 2019, the board expressed its provisional opinion on the case.
- IV. Both the appellant and the respondent informed the board that they would not attend the oral proceedings (letters dated 4 July 2019 and 12 July 2019, respectively). The board then informed the parties that the oral proceedings had been cancelled and that the decision would be taken in writing.
- V. The appellant (opponent 2) requested that the decision under appeal be set aside and the patent be revoked.

The respondent (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained in amended form on the basis of the description as attached to the decision of the opposition division and the set of claims filed by letter dated 4 July 2019.

The party as of right (opponent 1) filed no requests.

VI. The independent claims of the sole request on file read as follows:

"1. A method for the production of a multi-ply web material comprising at least two embossed plies joined together, including the steps of:

- embossing a first ply (V1), by forming a first set of protuberances (V1p);
- embossing a second ply (V2), by forming a second set of protuberances (V2p);
- applying an adhesive between said two plies (V1p, V2p);
- laminating the two plies together and joining them by gluing;

characterised in that

- said protuberances of the first set (V1p) are of limited size and high density and form a micro-embossing design on said first ply (V1);
- said protuberances of the second set of protuberances (V2p) have larger sizes and a lower density than the first protuberances (V1p);
- said second ply (V2) is free of a microembossing design;
- and the first ply (V1) does not undergo a second embossing, but only a flattening of the protuberances (V1p) of said first set where they meet the

protuberances (V2p) of the second set during lamination;
wherein said second ply (V2) is embossed between an embossing cylinder (9) and a pressure cylinder (11) having a yielding outer cylindrical surface; and wherein said two plies are laminated between said embossing cylinder (9) and a laminating cylinder (13) whose outer cylindrical surface has a greater hardness than that of said pressure cylinder (11)."

"6. An embossed web material comprising at least two embossed plies joined together, a first ply (V1) having a first set of protuberances (V1p), and a second ply (V2) having a second set of protuberances (V2p) facing the interior of the web material, said two plies being glued together at the positions of at least some of the protuberances (Vp2) of said second set; characterised in that

- the protuberances of said second set (V2p) have larger sizes and a lower density than the protuberances (V1p) of said first set, said protuberances (V1p) of said first set forming a micro-embossing;
- said second ply (V2) is free of a micro-embossing design;
- and said protuberances of said first set are flattened where they meet the protuberances (V2p) of said second set, but said first ply (V1) not being subjected to a second embossing."

For concision, the last feature will be referred to in the following as the "flattening feature".

VII. The appellant filed a series of objections against the set of claims which the opposition division had found to comply with the requirements of the EPC. In the following only the objections that apply to the request

filed by the respondent in a letter dated 4 July 2019 are presented:

(a) Compliance with Article 123(2) EPC

Claims 1 and 6 of the patent comprise the feature "said second ply is free of microembossing". This feature was not disclosed explicitly or implicitly in the application as filed.

The opposition division acknowledged that the feature was not explicitly disclosed in the original application (see end of page 9 of the decision under appeal). The opposition division was wrong to consider that it was implicitly disclosed.

As the description does not mention the structure of the plies at the beginning of the process, the skilled person is free to consider two alternatives:

(1) the second ply is pre-embossed, or (2) it is free of embossing at the beginning of the process.

Therefore, there is an ambiguity. Consequently, the feature under consideration fails the "novelty test". The argument that the skilled person would have envisaged the most simple realisation goes beyond the novelty test.

The feature is also not implicitly disclosed in Figure 4 either. A negative feature cannot be drawn from a schematic drawing (T 170/87). The ply is "free of micro-embossing" just because only "large embossings" are represented on the second ply. Furthermore, Figure 4 is also ambiguous. It shows a roll on which a web is wound. The portion of web which has been pulled from the roll shows a second ply that has a large embossment in form of flower and a first

ply with micro-embossing represented by dots. But on the portion of web which is still wound onto the core of the roll, said second ply is represented by a series of dots which are similar to the dots shown on the first ply. The most natural interpretation would be to consider the dots as micro-embossing. The opposition division interpreted them as a "shadow". As there are several possible interpretations, the feature cannot be said to be directly and unambiguously disclosed.

The feature was added during the examination in order to overcome a novelty objection with respect to document D1, which is state of the art under Article 54(3) EPC. It cannot be considered to constitute an allowable disclaimer. Document D1 does not qualify as "accidental anticipation"

In conclusion, claims 1 and 6 extend beyond the scope of the claims as filed.

(b) Clarity

Claim 6 is a product claim concerning a web material. The claim lacks clarity because the feature "said protuberances of said first set are flattened where they meet the protuberances of said second set" is a method feature and not a product feature. The feature is meaningful only if it is possible to compare the "flattened" protuberance before the flattening operation with the protuberance after the flattening operation. Otherwise it is not possible to ascertain that there was a flattening operation. This interpretation is reinforced by the wording "where they meet" used in method claim 1. The feature "where they meet" was replaced by "in correspondence" in claim 7 as granted. The wording "in correspondence" is a product

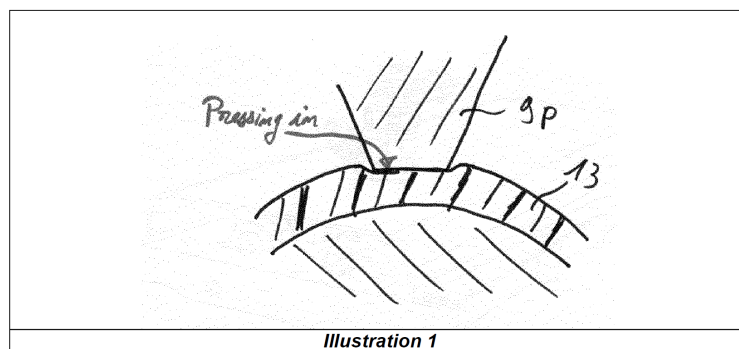
feature since this term refers to a static result. In contrast, the wording "where they meet" strongly suggests a displacement of the protuberances of the second set towards the protuberances of the first set before they contact each other at a meeting point. However, claim 6 concerns a product. It is therefore impossible to know from a sample of web if two protuberances glued "tip to tip" and which present a flat tip have been "flattened" as in claim 1 or if they have been glued together while their tip was already flat (for such an embodiment see for example Figure 9 of D1 or Figure 3 of document D5). It is also impossible to know from a sample of web if the protuberances of the first set were displaced towards the protuberances of the second set during the fabrication process. Thus, claim 6 as maintained is not clearly defined and contravenes Article 84 EPC.

(c) Insufficient disclosure

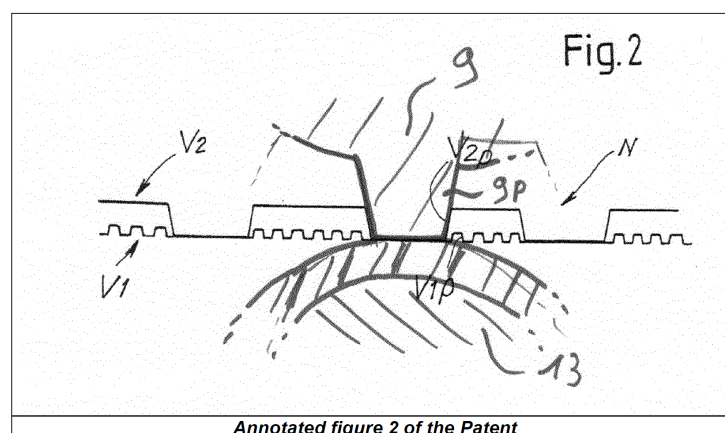
In order to carry out the claimed method and obtain the web material product, it is not sufficient for those skilled in the art, who have a lot of experience in embossing paper plies and combining them, to use their experience to be able to achieve flattening without a second embossing.

There is no technical teaching in the specification relating to the specifics of the non-second embossing of the first ply, i.e. how it could be carried out, in particular in the zones where there is a flattening of the first protuberances. The flattening of the protuberances of the first set without second embossing occurs between cylinder 9 and cylinder 13 shown in Figure 1 of the patent.

The only information regarding the laminating cylinder 13 is that it is provided with a surface the hardness of which is greater than the hardness of the surface of the pressure cylinder 11 ([0025]) and that it can be made of rubber ([0025] and hatching of Figure 1). This means that the cylinder 13 has a yielding surface, albeit less elastic than that of cylinder 11. Cylinder 9 is made of steel ([0024]). The description does not give any information about the nip between cylinder 9 and cylinder 13. Consequently, there is a good chance that the protuberances 9p of cylinder 9 press into the yielding surface of the laminating cylinder 13:



Thus it is unlikely that the web of Figure 2 is obtained without a second embossing of the first ply:



A "tip to tip" process as in document D5 is technically very difficult to carry out. The setting of the angular position and the gap/nip between the embossing rollers is described as "an acute technical problem" by the opposition division. Similarly, the adjustment of the elasticity of the yielding surface of the laminating cylinder 13 and the gap/nip between cylinder 9 and 13 is also an acute technical problem which cannot be solved from the description. Such results are far beyond the reach and knowledge of the skilled person. If it was a simple matter of selecting parameters (such as pressure, hardness, speed, density), for instance starting from the teachings of D5, the invention would lack inventive step. If the flattening feature meant crushing the whole overlapping areas so that the micro-protuberances do not exist anymore, then the high pressure of such flattening / crushing would certainly result in a second embossing of the first ply.

(d) Lack of novelty

The subject-matter of claim 6 lacks novelty over the disclosure of document D5.

Document D5 discloses an embossed web material comprising at least two embossed plies joined together (page 1, first paragraph), a first ply 10 having a first set of protuberances 12, and a second ply 20 having a second set of protuberances 22 facing the interior of the web material. These two plies are glued together (page 3, last paragraph) at the positions of at least some of the protuberances 22 of said second set. The protuberances of the second set 22 have larger sizes (page 3, line 26: "l'empreinte est linéaire" along with Figure 2) and a lower density than the

protuberances 12 of the first set (page 3, line 23: "inférieur à 2000 par m²"). The protuberances 12 of the first set form a micro-embossing (page 3, line 12: "au moins 30 par cm²" which corresponds to the density given in [0023] of the patent). The second ply V2 is free of a micro-embossing design (page 3 line 24: "portion de surface lisse"). The protuberances 12 of the first set are flattened where they meet the protuberances 22 of the second set, but the first ply 10 is not subjected to a second embossing.

This last feature has to be analysed in view of product claim 6 and not in view of method claim 1. Since the term "flatten" has to be interpreted as a "product feature", it means "presenting a flat tip". As represented in Figure 3 of D5, the protuberances 12 of the first set do in fact have a flat tip "where they meet the protuberances of the second set".

(e) Lack of inventive step

The subject-matter of claim 6 at least lacks inventive step over the disclosure of document D5.

The flattening feature does not confer any technical effect or advantage to the web material. Therefore, there is no technical problem, no technical effect and no inventive step.

To defend the inventive step of claim 6, the opposition division used an argument that related to the method for producing the web. However, claim 6 is a product claim. There is nothing that would make it possible to establish a difference between a web obtained by the process of the patent and a web obtained by the process of document D5.

VIII. The respondent argued as follows:

(a) Compliance with Article 123(2) EPC

The application as originally filed discloses in detail on page 7, lines 10-24, the manufacturing process, according to which the first web V1 is fed to the first embossing unit 1 and is embossed between rollers 3, 5 so as to be given a micro-embossing design with protuberances corresponding to protrusions 3P. The micro-embossed web V1 and the micro-embossed protuberances V1P thereof are clearly shown in Figure 2. According to the description, page 7, line 16, the second ply V2 is embossed between the pressure cylinder 11 and embossing cylinder 9. The protuberances formed in this way are shown at V2p in Figure 2.

The very purpose of Figure 2 is to show the actual embossing structure of the web. It is clear from Figure 2 that the two plies V1 and V2 do not include any additional embossing patterns, except those formed by micro-embossing V1p and by the decorative embossing V2p.

The representation of Figure 2 in combination with the description of the embossing method on page 7 informs the skilled reader clearly and unambiguously that the second ply V2 is free of micro-embossing.

The description does not mention the structure of the first and second plies at the beginning of the process. The skilled person would be free to consider any alternative: the first and second plies may be free of embossing before being fed into the disclosed process

or pre-embossing may be present. The skilled person would at least envisage the simplest realisation in which the process is started from the first and second plies free of any pattern.

Thus, the feature of the second ply being free of micro-embossing meets the novelty test and is supported by the original application.

Moreover, starting the disclosed embossing process by using first and second plies which are free of previously generated embossing patterns is the only embodiment consistent with Figure 2. The very purpose of this figure is to show the resulting final multi-ply web. No other embossing patterns are shown in Figure 2, except those formed by protrusions V1p and V2p. This conveys to the skilled reader the clear and unambiguous teaching that the second ply V2 is free of micro-embossing.

Figure 4 is not the only figure of the final product obtained by the method. Figure 2 contains additional information on the embossing patterns of the two plies V1 and V2.

The contested feature can therefore be derived clearly and unambiguously from the application as originally filed.

(b) Clarity

The flattening feature is clearly understood by the skilled person to be a structural feature of the final product.

The feature actually defines a feature of the final product, once it has been processed according to the method as claimed in claim 1 and as disclosed in the patent. The appearance of an embossed product is the direct consequence of the embossing method used. If a tissue paper ply is firstly micro-embossed by the rollers 3 and 5 of the micro-embossing unit 1 (see Figure 1) and subsequently laminated between the lamination roll 13 and the protrusions 9P of the embossing roller 9, the consequence is that the micro-embossed protrusions V1p generated in the first ply V1 are subject to a flattening operation. The result is clearly visible in the final product. Thus, for the skilled reader the contested sentence defines a step of a paper converting method as well as a feature of the final product obtained by the converting method.

The term "where they meet", also has both a static and a dynamic meaning. The protrusions of the two plies are brought together during the embossing process, such that the two sets of protrusions meet one another. At the end of the process, the protrusions meet one another. Also in this case, the contested feature would be clearly understood by the skilled reader as a structural feature of the final product.

(c) Insufficient disclosure

The skilled person would have known how to carry out the invention.

The question of sufficiency of disclosure has to be evaluated on the basis of the content of the patent as a whole, taking into consideration common general knowledge.

In the present case, the skilled reader is a mechanical engineer with a university degree and several years experience in the field of embossing machines. Those skilled in the art are expert in the fundamentals of paper making and paper converting technology. They know that embossing is a technique used in paper converting for permanently modifying the structure of a cellulosic web. They also know that embossing is achieved by passing paper plies in embossing nips formed by an embossing roller having embossing protrusions on the cylindrical surface thereof, and a pressure roller having a yielding coating. Embossing is obtained by the protrusions penetrating into the yielding coating layer of the pressure roller.

Any mechanical engineer would know that materials deform when a force is applied to them. The deformation may be elastic or permanent. An elastic deformation recovers once the force applied to the material causing the deformation has been released. A permanent (plastic) deformation occurs when the so-called elastic limit or yield limit has been reached, i.e. when the applied stress causes a permanent deformation of the material. The permanent deformation does not recover once the force has been removed, i.e. the material will remain permanently deformed.

This is also true for paper, which is a material formed by cellulosic fibers. Embossing is achieved when the embossing protrusions penetrate into the yielding coating of the pressure roller to such an extent that the paper ply passing between the embossing roller and the pressure roller is deformed beyond the yield point. The more the protrusions penetrate into the yielding coating of the pressure roller, the more the paper will be permanently deformed.

Those skilled in the art know that the displacement of cellulosic fiber displacement can be controlled by modifying two parameters: the hardness of the surface of the pressure roller and the pressure on the area of contact between the embossing protrusions and the yielding surface of the pressure roller. They are perfectly capable of selecting the hardness of the laminating roller 13 and the linear pressure (N/m) between rollers 9 and 13 in order to achieve flattening with no re-embossing of the micro-embossing protrusions.

It should be noted that these parameters vary depending upon the actual embossing pattern. The larger the front surface of the embossing protrusions $9P$, the smaller the local pressure (N/m^2) at the point of contact, the linear pressure (i.e. the force per linear unit of the line of contact between rollers 9 and 13) being the same. Once the embossing pattern is defined, those skilled in the art can easily find the correct pressure between the rollers 9 and 13 for a given hardness of the roller surface, by a simple routine test. This is particularly relevant because modern embossing machines have electronic control means for controlling the pressure between embossing rollers and pressure rollers. It is simply a matter of iteratively changing such pressure on the fly, i.e. while the embossing unit is operating, by means of a simple operator interface, until the desired result is achieved.

(d) Lack of novelty

The subject-matter of claim 6 is new over the disclosure of document D5.

The feature "the protuberances of the first set are flattened where they meet the protuberances of the second set" of claim 6 must be interpreted in light of the description and drawings. The appellant's interpretation is clearly incorrect and at odds with the content of the patent as a whole. The patent clearly teaches that "flattened" means that the protrusions in question have been squeezed back and crushed, thus "destroying" their shape as obtained by the previous micro-embossing.

It should be noted that the claim requires the micro-embossing protrusions V1p to be flattened "where they meet the protuberances V2p of the second set". This implies a different structure of the micro-embossing protrusions: those located in front of the protrusions V2p are flattened, while others are not. This has nothing to do with the flat tip of the protuberances.

(e) Lack of inventive step

The subject-matter of claim 6 does not lack inventive step over the disclosure of document D5.

Reasons for the Decision

1. Applicable law

The application on which the patent is based was filed on 9 June 2000. In accordance with Article 7 of the Act revising the EPC of 29 November 2000 (Special edition No. 4, OJ EPO, 217) and the Decision of the Administrative Council of 28 June 2001 on the transitional provisions under Article 7 of the Act revising the EPC of 29 November 2000 (Special edition No. 4, OJ EPO, 219), Articles 54(1) and (2), 56 and 84 EPC 1973 and Article 123 EPC [2000] apply in the present case.

2. Claim interpretation: the flattening feature

2.1 "said protuberances ... are ... flattened where they meet the protuberances ... of said second set"

Claim 6 requires the protuberances of the first set to be "flattened" where they meet the protuberances of said second set.

The term "flattened" is not defined in the patent. Thus it is necessary to establish what the skilled person would have understood the term to mean.

2.1.1 General meaning of the term "flattened"

The Oxford English Dictionary defines the verb "flatten" as "to make flat" and the adjective "flat" as "horizontally level; without inclination"; a surface is said to be "flat" when it is "without curvature, indentation, or protuberance".

Considering this general meaning of the term, the skilled reader trying to ascertain the meaning of protuberances being "flattened" might have wondered whether the height of the protuberances is reduced or whether the protuberances are made completely flat. The skilled person would have sought the answer to this question in the overall disclosure of the patent.

2.1.2 Use of the term in the patent

Although the interpretation of the claim should be based on the patent rather than on documents on which it is based, the board notes that in the original application the statement that the micro-protuberances of the first ply are "flattened" is always used in combination with the expression "where they meet the protuberances" of the second set or ply (see page 7, line 32, as well as original claims 9 and 13); the same holds true for the sole reference to "flattening" (see page 4, line 10). This appears to be an indication that the drafter of the patent understood the term "flattened" to be a physical property of the protuberances in the region of contact between the plies rather than a mere reference to a flattening process.

There is only one passage in the patent that sheds light on the meaning of "flattened", namely paragraph [0031], which corresponds to the paragraph extending from page 7, line 28 to page 8, line 1, of the original application and reads:

"The web material N which is obtained at the exit from the embossing device has the structure shown schematically in the enlargement in Figure 2. The second ply V2 has a set of protuberances V2p,

of relatively large size, which form a personalized design, while the first ply V1 has micro-protuberances V1p which are flattened where they meet the protuberances V2p, where the two plies have been laminated and glued." (underlining added by the board)

Fig.2

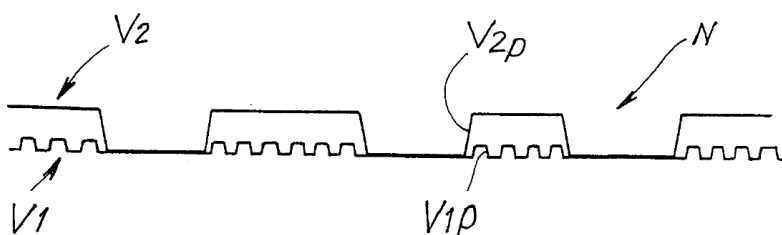


Figure 2 suggests that the micro-protuberances V1p have been made completely flat where the plies meet. There appears to be no disclosure in the patent that would mitigate this finding.

The board cannot see any basis in the patent for the appellant's interpretation, according to which the verb "flatten" is to be understood as "presenting a flat tip".

In its decision the opposition division took the view that

"... the term "flattened["] does not mean "flat" but only "having been subjected to a flattening operation" which does not imply that the flattening operation have been performed up to a totally crushed configuration of the protuberances."
(page 9, third paragraph, of the decision under appeal)

The board notes that the division proceeded by mere assertion and did not provide any arguments to establish that this understanding is actually derived from the patent. Therefore, the board is unable to endorse this interpretation.

Consequently, the board concludes that the feature that the micro-protuberances are "flattened" is understood to mean that they have undergone a flattening operation and have a completely flat configuration.

This operation leaves traces, because it inevitably causes the local overlapping of web material; therefore, the fact that protuberances have been flattened can still be ascertained by close examination of the web material. Consequently, even if the feature is understood to constitute a "product-by-process feature", it is a feature that is potentially suitable for distinguishing the claimed subject-matter from the state of the art.

3. Clarity (Article 84 EPC 1973)

The board has reached the conclusion that the claims on file meet the requirements of Article 84 EPC 1973.

The appellant's objection is based on the fact that the last feature of claim 6 is a product-by-process feature. This objection is inoperative, because it already applies to claim 6 as granted, the clarity of which is beyond the scrutiny of the board (see decision G 3/14 of the Enlarged Board of Appeal, OJ EPO 2015, A102).

4. Added matter (Article 123(2) EPC)

The board has reached the conclusion that the claims on file meet the requirements of Article 123(2) EPC, for the following reasons.

The appellant's objection relates to the negative feature (or disclaimer) of both independent claims according to which the second ply is "free of a micro-embossing design". There is no *verbatim* disclosure of this feature in the original application. The feature was added during the grant proceedings to establish novelty over document D1, which is state of the art according to Article 54(3) EPC.

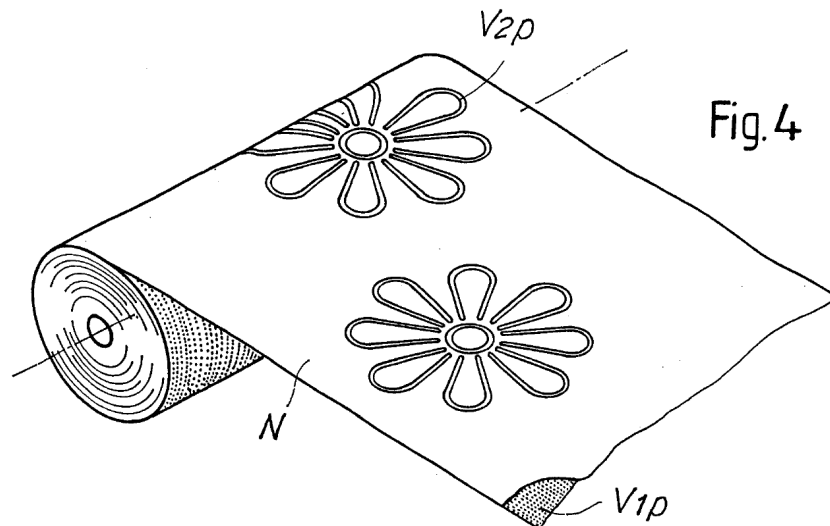
Such an amendment is allowable:

- if the negative feature is implicitly disclosed as such in the original application; or
- if the disclaimer is undisclosed in the original application but complies with the requirements formulated in decision G 1/03 of the Enlarged Board of Appeal (OJ EPO 2004, 413).

In the present case the negative feature is implicitly but nevertheless directly and unambiguously disclosed in the original application. The whole gist of the invention disclosed in the original application is to combine a first ply having large protuberances which form the decorative motif and a second ply that is micro-embossed such that, when the material is wound into rolls, there is no nesting between consecutive turns (see in particular page 5, lines 4 to 8 and 19 to 26).

The disclosure relating to the preferred embodiment shown in Figures 1 to 4 corroborates this interpretation. Figure 2 (reproduced above, see point 2.) clearly shows a web material consisting of two plies, one of which (V1) is micro-embossed whereas the other (V2) only has large embossings and cannot be said to be micro-embossed.

Figure 4 does not lead to a different understanding. It is true that the Figure is somewhat misleading because the outer surface of the web that is still coiled is drawn in a way similar to the micro-embossed region V1p. However, regardless of whether the draughtsman made a mistake (considering that the micro-embossed ply was visible) or intended to suggest a shadow, the skilled person would not interpret the figure to mean that ply V2 is or can be micro-embossed.



Incidentally, the board wishes to point out that the relevant test for the assessment of amendments is the so-called "gold standard" test (see decision G 2/10 of the Enlarged Board of Appeal (OJ EPO 2012, 376)); the test known as the "novelty test", which was sometimes

used in the early days of the boards of appeal, is no longer used (see "Case Law of the Boards of Appeal of the European Patent Office", 9th edition, 2019, point II.E.1.3.7).

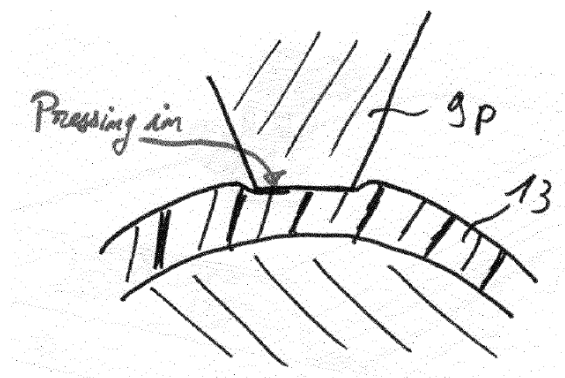
As the negative feature is disclosed as such in the original application, it is not necessary to examine whether the conditions set out in decision G 1/03 (and confirmed in G 1/16) are fulfilled.

Incidentally, the board notes that even if the negative feature qualified as an "undisclosed disclaimer", the question of whether the prior art D1 is an "accidental anticipation" is irrelevant because document D1 is state of the art according to Article 54(3) EPC. Decision G 1/03 refers to accidental anticipations only in the context of state of the art under Article 54(2) EPC.

5. Sufficiency of disclosure (Article 83 EPC 1973)

The board has reached the conclusion that the claims on file meet the requirements of Article 83 EPC 1973, for the following reasons.

The appellant argued that the skilled person would not have known how to flatten the protuberances of the first ply without a second embossing, in particular because the protuberances of embossing cylinder 9 would probably deform the yielding surface of the laminating cylinder 13, as depicted in the appellant's illustration:



This objection is unfounded. The fact that a certain result is not easily obtained but requires the careful adjustment of materials and process parameters does not mean that the skilled person is hindered from carrying out the invention.

6. Novelty (Article 54 EPC 1973)

The board has reached the conclusion that the claims on file meet the requirements of Article 54 EPC 1973, for the following reasons.

The appellant argued that claim 6 was not new in view of the disclosure of document D5. The opposition division considered that the feature, according to which the protuberances of the first ply are essentially flattened where they meet the protuberances of said second set, was not disclosed in document D5.

Document D5 discloses an embossed web material comprising two embossed plies 10 and 20 that are joined together. Plies 10 and 20 have protuberances 12 and 22, respectively. They are glued together at the positions of at least some of the protuberances of the ply 20 (see Figure 3).

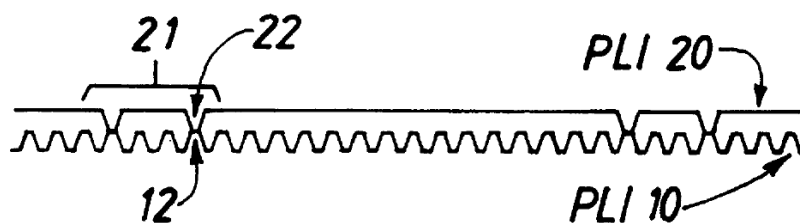


FIG.3

The protuberances 22 of ply 20 have larger sizes and a lower density than the protuberances 12 of ply 10, which form micro-embossing (see page 3, lines 9 to 24). Ply 20 has no micro-embossing design.

Therefore, the question of novelty hinges on the flattening feature.

The appellant's objection of lack of novelty is based on an understanding of the term "flattened" which the board cannot endorse (see point 2.1). There is no disclosure in document D5 that the protrusions 12 have undergone a flattening operation and have been made completely flat in the region of contact between the plies.

7. Inventive step (Article 56 EPC 1973)

The board has reached the conclusion that the claims on file meet the requirements of Article 56 EPC 1973. In its examination the board used the problem-solution approach.

7.1 Starting point

The appellant based its attack on document D5, which is a reasonable starting point for the assessment of inventive step.

7.2 Differences

Claim 6 differs from the disclosure of document D5 in the flattening feature (see point 6 above).

7.3 Technical effect

The appellant based its reasoning on the absence of any technical effect. It is true that paragraph [0031] of the patent, which appears to be the only passage disclosing this feature, is merely descriptive of Figure 2 and does not mention any effect. Nevertheless, the skilled person would not have considered that this feature has no technical effect. Rather, the skilled person would have understood that compared to the tip-to-tip lamination shown in Figure 3 of document D5 (reproduced above, see point 6) establishing contact between the plies by flattening the micro-protrusions would be easier to accomplish.

7.4 Objective technical problem

Accordingly, the objective technical problem solved by the invention is to simplify the production process of the web material.

7.5 Obviousness

As mentioned in point 7.3 above, the appellant's argument based on the absence of any technical effect cannot be endorsed.

The appellant has not filed any other persuasive arguments to establish that the skilled person starting from document D5 and seeking a solution to the

objective technical problem as defined above would have arrived at the claimed subject-matter in an obvious way.

As a consequence, the invention is "considered as involving an inventive step" within the meaning of Article 56 EPC 1973.

8. Conclusion

The request filed by the respondent in a letter dated 4 July 2019 overcomes all of the objections raised by the appellant. Therefore, the patent can be maintained on this basis.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent in the following version:

Description

- pages 2 and 4 of the patent specification
- page 3 as filed during the oral proceedings before the opposition division

Claims

- claims 1 to 10 filed by letter dated 4 July 2019

Drawings

- Figures 1 to 4 of the patent specification

The Registrar:

The Chairman:



N. Schneider

M. Poock

Decision electronically authenticated