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**Datasheet for the decision
of 6 December 2021**

Case Number: T 2605/18 - 3.2.05

Application Number: 12003812.0

Publication Number: 2664451

IPC: B31F1/07

Language of the proceedings: EN

Title of invention:

Hybrid multi-ply tissue paper product and method for
manufacturing the same

Patent Proprietor:

SCA TISSUE FRANCE

Opponent:

Kimberly-Clark Worldwide, Inc.

Relevant legal provisions:

EPC Art. 54, 56, 84

EPC R. 43(6)

RPBA 2020 Art. 13(2)

Keyword:

Novelty (no: patent as granted)

Inventive step (no: auxiliary requests 1, 2, 3', 4', 5', 8)

Clarity (no: auxiliary requests 3, 4, 5, 6, 6', 7, 7', 9, 9')

Admittance of new oral submissions (yes: no amendment of the case)

Decisions cited:

G 0001/04, T 0056/04, T 0247/20



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Case Number: T 2605/18 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 6 December 2021

Appellant: SCA TISSUE FRANCE
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 23 August 2018
revoking European patent No. 2664451 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman P. Lanz
Members: B. Spitzer
T. Karamanli

Summary of Facts and Submissions

I. The patent proprietor lodged an appeal against the opposition division's decision to revoke European patent No. 2 664 451 ("the patent").

In the decision under appeal, the opposition division decided that the subject-matter of claim 1 of the patent as granted was not new; the subject-matter of claim 1 of auxiliary requests 1, 2 and 8 was not inventive; and claim 1 of auxiliary requests 3 to 7 and 9 lacked clarity.

II. Among the documents considered by the opposition division, documents D1 (US 5,830,558) and D7 (US 2009/0162597 A1) are particularly relevant to the appeal proceedings.

III. On 23 October 2020, the board issued a summons to oral proceedings. In a communication under Article 15(1) of the Rules of Procedure of the Boards of Appeal 2020 ("RPBA 2020" - see OJ EPO 2019, A63) dated 20 September 2021, the board gave its preliminary opinion.

IV. Oral proceedings before the board were held by videoconference on 6 December 2021.

V. *Requests*

The appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained as granted (main request) or, in the alternative, be maintained as amended on the basis of the claims of one of the following auxiliary requests:

auxiliary requests 1 and 2 filed by letter dated 12 May 2016

auxiliary request 3 filed by letter dated 19 February 2018

auxiliary request 3' filed with the statement of grounds of appeal

auxiliary request 4 filed by letter dated 19 February 2018

auxiliary request 4' filed with the statement of grounds of appeal

auxiliary request 5 filed by letter dated 19 February 2018

auxiliary request 5' filed with the statement of grounds of appeal

auxiliary request 6 filed by letter dated 19 February 2018

auxiliary request 6' filed with the statement of grounds of appeal

auxiliary request 7 filed by letter dated 19 February 2018

auxiliary request 7' filed with the statement of grounds of appeal

auxiliary request 8 filed by letter dated 19 February 2018

auxiliary request 9 filed by letter dated 19 February 2018

auxiliary request 9' filed with the statement of grounds of appeal

The respondent (opponent) requested that the appeal be dismissed.

VI. Independent claim 1 of the patent as granted (main request) reads as follows:

"1. A hybrid multi-ply tissue paper product (1) comprising at least three plies made of tissue paper base-sheet, wherein:

- at least one ply is a structured ply (10, 11, 12) produced by a structuring manufacturing method, the structured ply (10, 11, 12) comprising a structured back face (19);
- at least another ply is a wet pressed ply (2, 3, 4, 5, 6, 7, 14, 15) produced by a wet press manufacturing method;

wherein the structured ply (10, 11, 12) is positioned and orientated with respect to the at least two other plies such that the structured back face (19) of the structured ply (10, 11, 12) is facing the at least two other plies so as to dampen a two-sidedness effect related to the structured back face (19)."

The patent as granted also comprises an independent method claim 12.

VII. Auxiliary requests

Compared with the main request, claim 1 of auxiliary request 1 has been amended by adding the feature "wherein the structured ply (10, 11, 12) faces at least two wet pressed plies (2, 3, 4, 5, 6, 7, 14, 15)". Independent method claim 12 is amended accordingly.

In claim 1 of auxiliary request 2, the feature of claim 1 of the main request "at least another ply is a wet pressed ply" is replaced by the feature "at least two plies are wet pressed plies". Moreover, the following

features are added at the end of the claim: "wherein a first wet pressed ply (2, 3, 4, 5, 7) comprises a first microstructure pattern with first protuberances (8); and wherein a second wet pressed ply (2, 3, 4, 5, 7) comprises a second microstructure pattern with second protuberances (9)". Independent method claim 10 is amended accordingly.

Compared to the main request, the following feature is added in claim 1 of auxiliary request 3: "wherein the wet pressed plies (2, 3, 4, 5, 6, 7, 14, 15) are bonded together according to a nested flat internal ply manufacturing process". Independent method claim 11 is amended accordingly.

Compared to the main request, claim 1 of auxiliary request 4 comprises the additional features "wherein a first wet pressed ply and/or a second wet pressed ply comprises a first microstructure pattern with first protuberances (8, 9); and wherein the microstructure patterns comprise a combination of protuberances (8) with a first height (h1) and other protuberances (9) with a second height (h2)". Independent method claim 8 is amended accordingly.

Compared with auxiliary request 4, claim 1 of auxiliary request 5 has the following additional limitation on the second height (h2): "which is up to two times greater than the first height (h1)". Independent method claim 7 is amended accordingly.

In claim 1 of auxiliary requests 3', 4' and 5', the feature of the respective claims of auxiliary requests 3, 4 and 5 "at least another ply is a wet pressed ply" is replaced by the feature "at least two plies are wet pressed plies".

Auxiliary request 6 comprises three independent product claims instead of one independent product claim.

Claim 1 of auxiliary request 6 corresponds to claim 1 of auxiliary request 7; claim 2 of auxiliary request 6 corresponds to claim 1 of auxiliary request 8; and claim 3 of auxiliary request 6 corresponds to claim 1 of auxiliary request 9. The independent method claim was deleted.

Auxiliary request 6' comprises the three independent product claims of auxiliary request 6 with an added feature in brackets "(i.e. unembossed)" after the term "unhandled" in claims 1 and 3.

Claim 1 of auxiliary request 7 reads as follows, with the amendments with respect to claim 1 of the main request underlined:

"A hybrid multi-ply tissue paper product (1) comprising at least four plies made of tissue paper base-sheet, wherein:

- one ply is a structured ply (10) produced by a through air drying TAD manufacturing method, the structured ply (10) comprising a structured back face (19);
- three other plies (2, 4, 6) are wet pressed plies produced by a conventional wet press CWP manufacturing method;

wherein the structured ply (10) is unhandled;

- sandwiched between the wet pressed plies; and
- positioned and orientated with respect to two of the wet pressed plies such that the structured back face (19) of the structured ply (10) is facing the two of the wet pressed plies so as to dampen a two-sidedness effect related to the structured back face (19)."

Auxiliary request 7 does not comprise an independent

method claim.

Claim 1 of auxiliary request 9 reads as follows (amendments with respect to claim 1 of the main request are underlined):

"A hybrid multi-ply tissue paper product (1) comprising at least four plies made of tissue paper base-sheet, wherein:

- two plies are structured plies (10,11) produced by a through air drying TAD manufacturing method, the structured plies (10, 11) comprising a structured back face (19);

- two plies are wet pressed plies (14, 15) produced by a conventional wet press manufacturing method; wherein

- the two wet pressed plies (14, 15) are in a central position between the structured plies (10, 11);

- the structured plies (10, 11) are unhandled; and

- each structured ply (10, 11) is positioned and orientated with respect to the two wet pressed plies such that the structured back face (19) of the structured ply (10, 11, 12) is facing the two wet pressed plies (14, 15) respectively, so as to dampen a two-sidedness effect related to the structured back face (19)." Auxiliary request 9 does not comprise an independent method claim.

Compared with auxiliary requests 7 and 9, claim 1 of auxiliary request 7' and 9' is amended by the addition of a feature in brackets "(i.e. unembossed)" after the term "unhandled".

Claim 1 of auxiliary request 8 reads as follows (the amendments compared to claim 1 of the main request are underlined):

"A hybrid multi-ply tissue paper product (1) comprising at least four plies made of tissue paper base-sheet,

wherein:

- one ply is a structured ply (12) produced by a through air drying TAD manufacturing method, the structured ply (12) comprising a structured back face (19);

- three other plies are wet pressed plies (2, 3, 6) produced by a conventional wet press CWP manufacturing method;

wherein the structured ply (12)

- is in an external position with respect to the wet pressed plies (2, 3, 6); and wherein

- the structured ply (12) is positioned and orientated with respect to the three wet pressed plies such that the structured back face (19) of the structured ply (12) is facing the three wet pressed plies so as to dampen a two-sidedness effect related to the structured back face (19)." Auxiliary request 8 does not comprise an independent method claim.

VIII. The appellant argued essentially as follows.

Claim 1 of the patent as granted - novelty vis-à-vis document D1

Document D1 disclosed all the features of claim 1 except for the last feature "*the structured ply (10, 11, 12) is positioned and orientated with respect to the at least two other plies such that the structured back face (19) of the structured ply (10, 11, 12) is facing the at least two other plies so as to dampen a two-sidedness effect related to the structured back face (19)*". Figure 2A of document D1 together with the disclosure in this document in column 8, lines 48 to 59 did not disclose this specific orientation. Consequently, the subject-matter of claim 1 of the *patent as granted* was new.

Claim 1 of auxiliary request 1 - inventive step over document D7 alone

Paragraphs [0133] and [0134] of document D7 disclosed a hybrid tissue product. As the orientation was not disclosed, the subject-matter of claim 1 was new over document D7. The objective technical problem was to provide a soft multi-paper product. Paragraph [0021] of document D7 was concerned with multi-factor optimisation. Softness was only one parameter. The only paragraph concerned with the two-sidedness effect was paragraph [0056] of document D7. But this paragraph related to a different embodiment. Considering the teachings of document D7, the person skilled in the art was not taught how to achieve a soft multi-paper product. It was doubtful whether the choice of the hybrid product according to paragraph [0134] of document D7 was straightforward for the person skilled in the art, particularly as this embodiment was only mentioned in the last part of document D7. It was correct that there were only two ways of arranging the structured ply. However, the person skilled in the art had to know how the two sides felt. Thus, the subject-matter of claim 1 of auxiliary request 1 involved an inventive step.

Claim 1 of auxiliary request 2 - inventive step over document D1 in combination with document D7

Document D1 disclosed a multiple ply tissue paper from which the subject-matter of claim 1 differed in that there were at least two wet pressed plies and in that a first wet pressed ply comprised a first microstructure pattern with first protuberances and a second wet pressed ply comprised a second microstructure pattern

with second protuberances. The opposition division's formulation of the objective technical problem of providing a soft multi-ply tissue paper product having good mechanical integrity was correct. Document D7 listed a lot of advantages in paragraph [0015], among them, ready disintegration. As this was in contradiction to the objective technical problem to be solved by the invention, the person skilled in the art would not have considered document D7. Even if the person skilled in the art had turned to this document, they would not have arrived at the claimed invention. The opposition division had referred to Figure 1 and paragraphs [0054], [0053] and [0134] of document D7. According to paragraph [0054], the first ply or group of plies was embossed with a decorative pattern; the inner layer had coarse microembossing; and the third ply or group of plies also had microembossing. In the embodiment of paragraph [0134], the outer plies were TAD (through air drying) plies. These embodiments were incompatible because the person skilled in the art would not have embossed a TAD ply, which already inherently had its structure. Furthermore, mechanical ply bonding should be distinguished from a regular embossing technique. Therefore, the subject-matter of claim 1 of auxiliary request 2 involved an inventive step.

Non-admittance of the respondent's submissions concerning auxiliary request 2 in view of documents D1 and D7

In its reply to the statement of grounds of appeal, the respondent merely stated that the opposition division's reasoning was correct without providing further arguments. During the oral proceedings, it cited further passages of document D7 and put forward new

arguments. This was not prompted by a preliminary opinion of the board. Thus, these submissions constituted an amendment of the respondent's case and should not be taken into account.

Claims of auxiliary requests 3, 4 and 5 - clarity

The appellant did not provide arguments on clarity of the claims of these requests, neither in its grounds of appeal nor during the oral proceedings.

Claim 1 of auxiliary request 3' - inventive step over document D1 in combination with document D7

Starting from document D1, the distinguishing features were the at least two wet pressed plies and that the wet pressed plies were bonded together according to a nested flat internal ply manufacturing process. The objective technical problem was the same as for auxiliary request 2, namely, to provide a soft multiply tissue paper product having good mechanical integrity. Due to the same reasons as given above, the person skilled in the art would not have taken into account the teachings of document D7. Even if they did, Figure 1 of document D7 did not show a structured ply and a nested configuration. Furthermore, it was not straightforward for the person skilled in the art to arrive at the claimed solution in view of the numerous examples given in document D7. Therefore, the subject-matter of claim 1 of auxiliary request 3' involved an inventive step.

Claim 1 of auxiliary request 4' - inventive step over document D1 in combination with document D7

The added feature according to which the microstructure patterns comprised a combination of protuberances with a first height and other protuberances with a second height indicated that the heights should be different. This was supported by dependent claim 2 according to which the second height was from approximately one to two times greater than the first height. This meant that the second height was between two and three times the first height. The fact that the first and second heights had to be different was also supported by claims 4 and 5 as filed. Claim 5 as filed, which claimed that the microstructure patterns comprise a combination of protuberances with a first height and other protuberances with a second height, did not depend on claim 4, which claimed protuberances of substantially identical heights.

The technical effect of the different heights was a better visual appearance, greater bulkiness while having reduced stiffness and a soft product. By having different heights of protuberances, it was for instance possible to apply adhesive only to the higher protrusions. Starting from document D1, the objective technical problem was the same as before, namely, to provide a soft multi-ply tissue paper product having good mechanical integrity. This was promoted by the microstructure patterns according to claim 1 of auxiliary request 4'. Neither document D1 nor document D7 disclosed such a feature. From Figure 2 of document D7, the person skilled in the art would not have been able to derive a microstructure pattern with different heights. Hence, the subject-matter of claim 1 of

auxiliary request 4' involved an inventive step.

Claim 1 of auxiliary request 5' - inventive step over document D1 in combination with document D7

In claim 1 of auxiliary request 5', the second height is specified as being up to two times greater than the first height. This made clear that the two heights were different as otherwise the term "greater" did not make sense. As this feature was not disclosed in either document D1 or document D7, the subject-matter of auxiliary request 5' involved an inventive step.

Claim 1 of auxiliary requests 6, 6', 7, 7', 9 and 9' - clarity

The opposition division concluded that the term "unhandled" was not clear. This was contested. Throughout the whole description, the term "unhandled" was used to mean not embossed. The appellant referred by way of example to paragraphs [0033], [0039], [0050] and [0051] of the patent. Even if "unhandled" were not a common term, the term was clear as the patent could be its own dictionary. A structured ply was not per se embossed. Embossing technology involved a ply running through the nip between an engraved embossing roll and a cooperating anvil roll. This was fundamentally different from a TAD manufacturing process. The embodiment of paragraph [0091] of the patent no longer fell under the scope of amended claim 1. In Figure 11 of the patent, there was no embossing nip for the structured ply 10. These considerations equally applied for claim 1 of auxiliary requests 6', 7, 7', 9 and 9'.

Claim 1 of auxiliary request 8 - inventive step

Auxiliary request 8 was directed to the embodiments of Figures 6 and 7 of the patent. Starting from document D7, the opposition division identified the orientation of the structured ply as the sole difference. But the subject-matter of claim 1 also differed in the number of plies and in the TAD ply being the outer layer. The person skilled in the art would not have arrived at the claimed invention without hindsight. Document D7 predominantly related to embodiments with wet pressed plies. Furthermore, the advantages listed in paragraph [0015] of document D7 were very general without specific teaching. There was a huge number of possibilities in document D7. The example with five plies shown in the table on page 4 of document D7 had TAD plies on both sides.

IX. The respondent argued essentially as follows.

Claim 1 of the patent as granted - lack of novelty vis-à-vis document D1

The subject-matter of claim 1 was not new. Document D1 clearly taught the claimed arrangement, and the reasoning in the decision under appeal was correct.

Claim 1 of auxiliary request 1 - lack of inventive step over document D7 alone

The embodiment in paragraph [0134] of document D7 was not far-fetched and vague. Indeed, the table on page 4 of document D7 showed an example of this embodiment which had five plies with the outer plies being structured TAD plies and the inner plies being CWP

(conventional wet press) plies. Furthermore, claims 37 and 39 of document D7 were directed to this embodiment, which did not disclose the orientation of the structured TAD plies. Paragraph [0134] of document D7 mentioned obtaining a soft feel. It was common general knowledge that TAD plies had a soft and a rough surface. With only two possibilities, it was obvious and common sense to place the TAD ply in such a way that the rough side was orientated inwardly to obtain a soft feel. Thus, the subject-matter of claim 1 of auxiliary request 1 was not inventive.

Claim 1 of auxiliary request 2 - lack of inventive step over document D1 in combination with document D7

The opposition division's conclusion was correct. The subject-matter of claim 1 of auxiliary request 2 did not involve an inventive step. The distinguishing features and the formulation of the objective technical problem as set out by the opposition division were correct. The person skilled in the art would have consulted document D7, which disclosed multi-ply sheets. In paragraph [0054], document D7 disclosed how to obtain good mechanical integrity. Paragraph [0015] of document D7 referred to by the appellant mentioned all the advantages, among them "*strong, soft*" and that it "*disintegrates readily*". The latter was not concerned with mechanical integrity but with the flushability of the tissue (see paragraph [0087] of document D7).

Starting from the multi-ply embodiment shown in Figure 2A of document D1 with two outer TAD plies and one inner CWP ply, the person skilled in the art would have consulted document D7 and replaced the inner CWP ply with two inner CWP plies according to the embodiment

shown in paragraph [0134] and the specific example given in the table on page 4 of document D7. Document D7 explicitly mentioned that good mechanical integrity was achieved by embossing the inner ply (see paragraph [0054] of document D7). Paragraph [0054] referred to the manufacturing according to Figure 2 and the embodiment of paragraph [0134] (see paragraph [0132] of document D7). Thus, these were not different embodiments but embodiments which referred to each other. This was also clear from paragraphs [0128] and [0130] of document D7. Claim 34 and dependent claim 37 of document D7 disclosed embossing and two outer exterior TAD plies, respectively.

Admittance of the respondent's submissions concerning auxiliary request 2 in view of documents D1 and D7

The additional oral submissions should be admitted because they were based on the opposition division's line of argument.

Claims of auxiliary requests 3, 4 and 5 - lack of clarity

The opposition division's reasoning was correct on this.

Claim 1 of auxiliary request 3' - lack of inventive step over document D1 in combination with document D7

The same line of argument as for auxiliary request 2 applied. The added feature concerning the nested configuration was generally known and was also disclosed in documents D1 and D7. Paragraph [0085] of the patent described this as a conventional process. Thus, it could not contribute to inventive step. A

nested configuration was also disclosed in column 10, lines 36 to 37 of document D1 and in Figure 1 of document D7.

Document D7 disclosed a multi-ply tissue with at least one structured ply and at least two wet pressed plies (see document D7, paragraph [0134] and the table on page 4, the example with five plies). This example referred back to Figures 1 and 2 as elaborated on for auxiliary request 2. Figure 1 of document D7 looked identical to Figure 1 of EP 1 081 284 referred to in paragraph [0085] of the patent. Thus, the subject-matter of claim 1 of auxiliary request 3' was not inventive over document D1 in combination with document D7.

Claim 1 of auxiliary request 4' - lack of inventive step over document D1 in combination with document D7

As the first height and the second height were not specified, they might be equal. Thus, the same argument applied as for claim 1 of auxiliary request 3'. Dependent claim 2 supported the assumption that the heights might be equal. The wording "*wherein the second height is from 1 to 2 times greater than the first height*" meant that the second height might be equal to the first height or be up to double the first height. Even if the heights were different, Figure 1 of document D7 disclosed protuberances having different heights. Thus, the argument was the same as for auxiliary request 3'. The subject-matter of claim 1 of auxiliary request 4' was not inventive over document D1 in combination with document D7.

Claim 1 of auxiliary request 5' - lack of inventive step over document D1 in combination with document D7

The added feature only mentioned an upper limit for the second height of up to two times greater than the first height. Therefore, the heights might still be equal, and the same argument applied for claim 1 of auxiliary request 4' and auxiliary request 5'. The subject-matter of claim 1 of auxiliary request 5' lacked an inventive step over a combination of documents D1 and D7.

Claim 1 of auxiliary requests 6, 6', 7, 7', 9 and 9' - lack of clarity

The term "unhandled" was vague and unclear. It was not a common term. Literally, it meant "not processed". In the patent, it was used to mean "not embossed". Consequently, there was ambiguity in the claim. Moreover, the description of the patent was not clear in this respect. While "unhandled" was used to mean "not embossed", there was in fact embossing in the patent. Paragraph [0085] and Figure 11 of the patent described a converting unit with embossment. Paragraph [0091] of the patent disclosed that the "through air dried ply 10 is also slightly embossed". Thus, the term "unhandled" and also its interpretation in the description as "not embossed" was not clear. The same argument applied for claim 1 of auxiliary requests 6', 7, 7', 9 and 9'.

Claim 1 of auxiliary request 8 - lack of inventive step

The subject-matter of claim 1 of auxiliary request 8 lacked an inventive step over document D7 alone. The example with five plies in the table on page 4 of

document D7 disclosed all the features of claim 1 except for the last feature related to the orientation of the structured ply. Thus, the same argument as for claim 1 of auxiliary request 1 applied.

Reasons for the Decision

1. Claim 1 of the patent as granted - lack of novelty over document D1

1.1 Document D1 discloses multiple ply tissue paper. The embodiment of Figure 2A of document D1 comprises two structured outer TAD (through air drying) plies 41A and 41B and one inner wet pressed ply 42 (see document D1, column 14, lines 21 to 30). This is not contested.

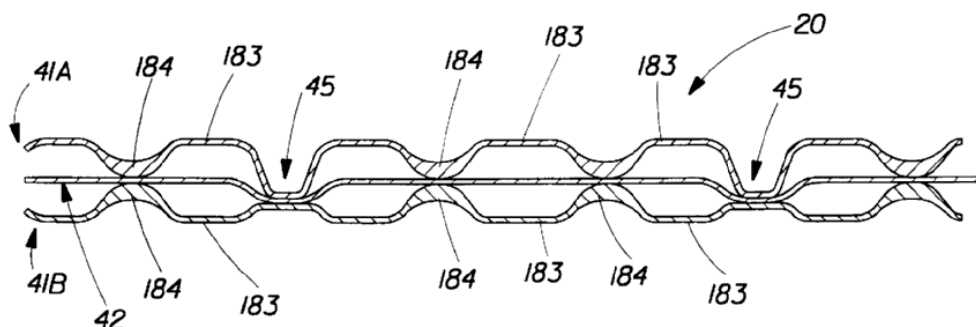


Fig. 2A

1.2 The appellant argued that there was no disclosure regarding the orientation of the structured ply with respect to the at least two other plies. The board does not concur with the appellant's assertion but shares the view of the opposition division (see decision under appeal, Reasons, point 14.1). The structured ply of the patent comprises two different faces, a rough face 19 and a smooth face 18. So do the structured plies 41A and 41B in Figure 2A of document D1. The rough face, i.e. the side which is relatively highly textured, has outwardly facing protrusions in the form of the domes

184 (see document D1, Figure 2A, column 8, lines 51 to 59). The board notes that the cited passage refers to the embodiment shown in Figure 1B of document D1, which discloses two structured plies 31 and 32 (see document D1, Figure 1B; column 12, line 62 to column 13, line 3; and column 13, line 15 and lines 43 to 45) produced by TAD manufacturing. Since the plies 41A and 41B of Figure 2A of document D1 are also manufactured by TAD, the structured plies 31 and 32 of Figure 1B correspond, at least as far as their surface structure is concerned, to the structured plies 41A and 41B of Figure 2A. Consequently, the disclosure that the rough side has outwardly facing protrusions in the form of domes 184 for Figure 1B equally applies to the embodiment shown in Figure 2A. Figure 2A of document D1 clearly shows that the domes 184 of the structured plies 41A and 41B face inwardly. This means that the orientation - contrary to the appellant's assertion - is unambiguously disclosed in Figure 2A of document D1. As the rough side faces inwardly, it is a logical consequence that the functional feature "*so as to dampen a two-sidedness effect related to the structured back face*" is equally anticipated by the embodiment of Figure 2A of document D1.

1.3 Conclusion on novelty of claim 1 of the patent as granted (main request)

The subject-matter of claim 1 of the patent as granted is not new (Article 54 EPC).

2. Claim 1 of auxiliary request 1 - lack of inventive step over document D7

2.1 The opposition division considered the subject-matter of claim 1 to be obvious, *inter alia*, in view of

document D7 alone (see decision under appeal, Reasons, points 15.1.1 and 15.1.2).

2.2 The board concurs with the opposition division that the subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step over document D7 alone.

2.2.1 Document D7 relates to multi-ply tissues (see paragraph [0001] of document D7). There are either tissues with all plies being manufactured by a CWP (conventional wet press, see paragraph [0128] of document D7) or by a TAD technique (see paragraph [0130] of document D7), or the tissues are hybrid tissues and comprise both type of plies obtained according to the CWP and TAD techniques (see paragraph [0133] of document D7). One embodiment is given in paragraph [0134] of this document, also referred to in the opposition division's decision. The hybrid tissue consists of two outer plies of the TAD type and inside plies produced for instance by the CWP technique. The use of the plural for the inside plies indicates that there must be at least two plies. The table on page 4 of document D7 contains an example with five plies (1TAD + 3CWP + 1TAD). As correctly stated in the opposition division's decision and as agreed by the parties, document D7 is silent about the orientation of the structured ply with respect to the other plies. Thus, the subject-matter of claim 1 of auxiliary request 1 differs from the disclosure of document D7 in that the structured ply is positioned and orientated with respect to the at least two other plies such that the structured back face of the structured ply is facing the at least two other plies to dampen a two-sidedness effect related to the structured back face.

2.2.2 The objective technical problem can be formulated as finding a hybrid tissue with a soft surface. This was

not disputed by the appellant.

- 2.2.3 Tissues manufactured with the TAD technique were generally known at the filing date of the patent. The two-sidedness is an inherent effect of this method, as can also be deduced from paragraph [0037] of the patent: *"As a consequence of the through air drying TAD manufacturing method, in particular supporting the wet paper fibers on a fabric and drying by means of a current of hot air passing through the fabric and the paper fibers, the front face 18 is smooth and soft whereas the back face 19 is structured (reproducing the structure of the fabric) and rough."*

Consequently, the person skilled in the art only had the two possibilities that the soft side faces either outwardly or inwardly. Paragraph [0134] of document D7 already mentions that the two outer TAD tissues result in a very soft feel. In accordance with the conclusion of the opposition division, the person skilled in the art would have turned the structured ply in such a way that its rough side, i.e. its structured back face, was facing inward.

- 2.2.4 The appellant argued that document D7 did not teach the person skilled in the art how to achieve a soft product. The board points out that document D7 explicitly mentions a soft feel obtained by the embodiment in paragraph [0134] and further gives specific examples in the table on page 4. With respect to the two-sidedness as an inherent effect of a TAD ply, the board refers to paragraph [0037] of the patent (see point 2.2.3 above).

2.3 Conclusion on inventive step of claim 1 of auxiliary request 1

The subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step over document D7 alone (Article 56 EPC).

3. Auxiliary request 2

3.1 Admittance of the respondent's submissions concerning auxiliary request 2 in view of documents D1 and D7

3.1.1 In accordance with Article 13(2) RPBA 2020, which applies by virtue of Article 25(1) RPBA 2020, any amendment to a party's appeal case made after the expiry of a period specified by the board in a communication under Rule 100(2) EPC or, where such a communication is not issued, after notification of a summons to oral proceedings is, in principle, not to be taken into account unless there are exceptional circumstances which have been justified with cogent reasons by the party concerned.

When applying Article 13(2) RPBA 2020, the first question is whether the submission objected to is an amendment to a party's appeal case. If that question is answered in the negative, the board has no discretion under Article 13(2) RPBA 2020 not to admit the submission.

3.1.2 In the case at hand, the respondent stated the following on page 1 of its reply to the statement of grounds of appeal with respect to auxiliary request 2:

"The reasoning of the opposition division with regard

to the previous nine auxiliary requests is equally correct and even to the extent that these requests satisfy the requirements of Articles 123(2) and 84 EPC (which is not the case for at least some of the requests), each of these requests at least lacks inventive step in view of D1 when combined with D7. For instance, D7 precisely discloses at paragraph [0134] products containing outer TAD plies in combination with plies (plural) produced using a wet-pressed technique (see also paragraph [0128]). This teaching is evidently highly compatible with D1 and the proprietor's arguments in that respect should not be followed."

In view of this general reference to the findings in the decision under appeal, the appellant requested that any oral submission which went beyond the opposition division's arguments and were related to newly cited passages in document D7 not be admitted.

In the judgment of the board, the submissions presented by the respondent during the oral proceedings to which the appellant objected were all aimed at illustrating, refining or further developing the arguments of the decision under appeal and countering the arguments of the appellant made in the appeal proceedings. Any additional passages or figures referred to merely served this purpose. The board notes that no additional pieces of evidence were submitted. The board therefore takes the view that the respondent's submissions objected to by the appellant do not amount to an amendment of the respondent's appeal case. Therefore, the board has no discretion under Article 13(2) RPBA 2020 not to admit them into the proceedings.

The above approach takes account of the fact that oral proceedings form an important part of proceedings

before the boards. Their prominence is underlined by the absolute right of a party to oral proceedings under Article 116 EPC. They serve to discuss matters pertinent to the decision of the board. Oral proceedings would serve no purpose if the parties were limited to present a mere repetition of the arguments put forward in writing. Instead, parties must be allowed to refine their arguments, even to build on them provided they stay within the framework of the arguments and of course the evidence, submitted in a timely fashion in the written proceedings (see decision T 247/20, Reasons, point 1.3).

3.2 Conclusion on admittance

The respondent's submissions concerning auxiliary request 2 in view of documents D1 and D7 do not constitute an amendment of the respondent's appeal case and thus form part of the proceedings.

3.3 Claim 1 of auxiliary request 2 - lack of inventive step over document D1 in combination with document D7

3.3.1 It is common ground between the parties that document D1 is a suitable starting point for assessing inventive step and that it discloses a multiple ply tissue paper (see document D1, Figure 2A), from which the subject-matter of claim 1 of auxiliary request 2 differs in that there are at least two wet pressed plies and in that a first wet pressed ply comprises a first microstructure pattern with first protuberances and a second wet pressed ply comprises a second microstructure pattern with second protuberances. The parties agreed with the opposition division's formulation of the objective technical problem, namely, to provide a soft multi-ply tissue paper product having

good mechanical integrity.

3.3.2 The appellant took the view that the person skilled in the art would not have consulted the teaching of document D7 to arrive at the claimed invention. As paragraph [0015] of document D7 listed many advantages, among them that the tissue readily disintegrates, the person skilled in the art would have been led away from a tissue having good mechanical properties. The board cannot endorse this argument. Ready disintegration is not primarily related to mechanical integrity but to flushability of the tissue, as also elaborated on in paragraph [0087] of document D7. It is to be understood to mean that the tissue "*readily breaks up in water*". Document D7 explicitly mentions mechanical integrity in the general passage in paragraph [0015] (see "strong") and in paragraph [0054]. The latter paragraph states that "*[t]his ply confers and gives the sheet thickness and a certain stiffness and good mechanical integrity*". "*This ply*" relates to the second ply 2 or group of plies positioned inside the sheet and comprises coarse microembossing. Thus, the board concurs with the respondent that the person skilled in the art, starting from document D1, would have considered the teaching of document D7.

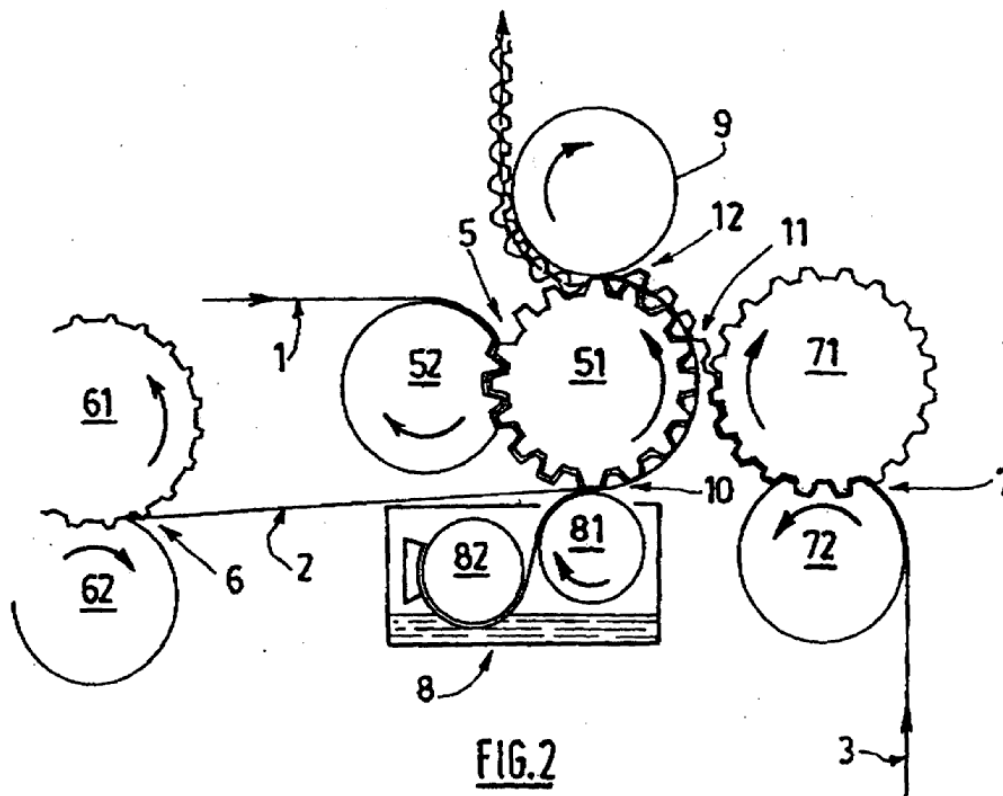
3.3.3 The appellant argued that even if the person skilled in the art had turned to document D7, they would not have arrived at the claimed solution. It asserted that the person skilled in the art would not have embossed a TAD ply because it was already inherently structured. Therefore, the embodiment in paragraph [0134] of document D7 was incompatible with the embodiment in paragraph [0054] and Figure 1 of the same document.

The board does not share the appellant's view. The

embodiment in paragraph [0134] of document D7 comprises two outer plies of the TAD type and inner plies produced by CWP. There is an example in the table on page 4 of document D7 which consists of five plies, two outer TAD plies and three inner CWP plies. This example is reflected in claim 39 depending on claim 37. Therefore, the person skilled in the art would have replaced the inner CWP ply of Figure 2A of document D1 with at least two wet pressed plies as disclosed in document D7.

In paragraphs [0053] to [0055], document D7 discloses that each ply or group of plies is embossed independently. The outer ply has a decorative pattern, the inner ply has a coarse microembossing, and the third ply has a different microembossing. This embodiment and the arrangement shown in Figure 1 is fully compatible with the embodiment of paragraph [0134].

According to paragraph [0132], the plies, including the plies of the TAD type described in paragraph [0130], may be associated using an installation as in Figure 2 of document D7.



In view of this disclosure, the appellant's argument that the skilled person would not have used TAD-type plies as exterior layers because plies of the TAD type were generally not embossed does not hold.

Reference is also made to claims 37 and 39 depending on claim 36 of document D7, according to which the at least three interior plies are joined together by mechanical bonding. This necessarily implies that they are embossed.

The appellant's argument that mechanical ply bonding should be distinguished from regular embossing is not convincing since the function or purpose of the microstructure pattern is not a feature of current product claim 1. It defines a microstructure pattern and does not make any reference to a manufacturing

method.

3.3.4 Conclusion on inventive step of the subject-matter of claim 1 of auxiliary request 2

The above findings confirm the opposition division's conclusion that the subject-matter of claim 1 is rendered obvious by document D1 in combination with document D7. The requirements of Article 56 EPC are therefore not met.

4. Claim 1 of auxiliary requests 3, 4 and 5 - lack of clarity

4.1 In the decision under appeal, claim 1 of auxiliary requests 3, 4 and 5 was found not to meet the requirements of Article 84 EPC since amended claim 1 covers, on the one hand, the possibility of having only one wet pressed ply ("at least one ply is a wet pressed ply"), while requiring, on the other hand, the presence of a plurality of wet pressed plies (see decision under appeal, Reasons, points 17, 18 and 19). The board shares this view, which remained uncontested by the appellant.

4.2 Conclusion on clarity

Claim 1 of auxiliary requests 3, 4 and 5 is not clear (Article 84 EPC).

5. Claim 1 of auxiliary request 3' - lack of inventive step over document D1 in combination with document D7

5.1 The parties agreed that document D1 was a suitable starting point for assessing inventive step, the distinguishing features and the objective technical

problem. The distinguishing features are the at least two wet pressed plies and that the wet pressed plies are bonded together according to a nested flat internal ply manufacturing process. The objective technical problem is to provide a soft multi-ply tissue paper product having good mechanical integrity. As document D7 discloses in Figure 1 that the (groups of) plies 1, 2 and 3 are bonded together in a nested configuration of the plies, and because this association is made using the manufacturing process according to Figure 2 (see document D7, paragraphs [0128], [0129] and [0132]), the same arguments apply as for auxiliary request 2 (see points 3.3.2 and 3.3.3 above).

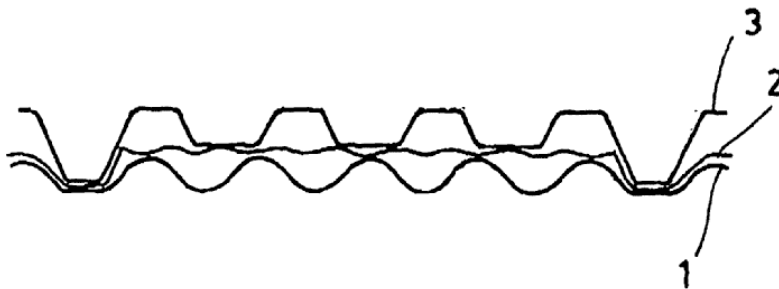


FIG.1

The fact that the embodiment disclosed in paragraph [0134] of document D7 was produced by a method according to Figure 2 was discussed for auxiliary request 2. The board thus concurs with the opposition division's considerations set out in the decision under appeal (Reasons, point 17.1).

- 5.2 Conclusion on inventive step of the subject-matter of claim 1 of auxiliary request 3'

The subject-matter of claim 1 of auxiliary request 3' does not involve an inventive step over document D1 in combination with document D7 (Article 56 EPC).

6. Claim 1 of auxiliary request 4' - lack of inventive step over document D1 in combination with document D7

- 6.1 Claim 1 of auxiliary request 4' comprises the additional features "wherein a first wet pressed ply and/or a second wet pressed ply comprises a first microstructure pattern with first protuberances (8, 9); and wherein the microstructure patterns comprise a combination of protuberances (8) with a first height (h1) and other protuberances (9) with a second height (h2)".

- 6.2 It is disputed how the second of these added features is to be interpreted and whether it covers the possibility that the first and second heights are identical. As argued by the respondent, claim 1 does not exclude the first height and the second height having the same value. The second height is not specified in relation to the first height.

Dependent claim 2 defines the second height with respect to the first height. But this further limitation is optional and does not, hence, justify a different, more restricted interpretation of the clear wording of claim 1.

The interpretation by the board is not changed when considering dependent claims 4 and 5 as filed, which

were referred to by the appellant. Claim 4 as originally filed claims microstructure patterns comprising protuberances of substantially identical heights, while claim 5 as originally filed claims that the microstructure patterns comprise a combination of protuberances with a first height and other protuberances with a second height. The fact that claim 5 as filed did not depend on claim 4 as filed does not allow coming to a conclusion on the subject-matter of claim 5 as filed or on claim 1 of auxiliary request 4'.

6.3 Even if the feature were interpreted to mean that the heights had to be different, Figure 1 of document D7 shows protuberances having different heights. Figure 1 also relates to the embodiment disclosed in paragraph [0134] of document D7 as discussed above under point 3.3 for auxiliary request 2.

6.4 As document D7 discloses two wet pressed plies, each having a microstructure of a certain height, the arguments set out above for auxiliary request 3' apply also for auxiliary request 4' (see point 5. above).

6.5 Conclusion on inventive step of the subject-matter of claim 1 of auxiliary request 4'

Consequently, the subject-matter of claim 1 of auxiliary request 4' does not involve an inventive step over a combination of documents D1 and D7 (Article 56 EPC).

7. Claim 1 of auxiliary request 5' - lack of inventive step over document D1 in combination with document D7

7.1 Compared with claim 1 of auxiliary request 4', claim 1 of auxiliary request 5' specifies the second height,

"which is up to two times greater than the first height". The board shares the respondent's view that this feature defines an upper limit for the second height. No lower limit is specified. Thus, it is not excluded that the first and second heights are identical.

- 7.2 The appellant's argument that the second height is not equal to the first height as otherwise the term "greater" would be meaningless cannot be accepted by the board. In view of the wording "up to two times greater", the claim clearly covers the possibility of the first and second heights being equal. This understanding is in line with the description of the patent (see paragraph [0019]), according to which the second height may be from approximately one to two times greater than the first height. As argued by the respondent, the expression "1 times greater" means "multiplied by 1" and thus that the first and second heights are equal. By the same token, "2 times greater" means "multiplied by 2" and therefore twice the height.

Because the wording of claim 1 of auxiliary request 5' does not exclude that the first and second heights are identical, the above considerations regarding inventive step of the subject-matter of claim 1 of auxiliary request 4' equally apply to claim 1 of auxiliary request 5'.

- 7.3 Conclusion on inventive step of the subject-matter of claim 1 of auxiliary request 5'

The subject-matter of claim 1 of auxiliary request 5' does not involve an inventive step over a combination of documents D1 and D7 (Article 56 EPC).

8. Claim 1 of auxiliary requests 6, 7 and 9 - lack of clarity
- 8.1 The respondent objected to the term "unhandled" as being unclear in the context of claim 1. This term "unhandled" had no general meaning in the art and would be understood as "not processed". However, in the description it was defined as "not embossed". Due to the different meanings, the term was ambiguous and, thus, rendered claim 1 unclear.
- 8.2 In the decision under appeal, it was concluded that claim 1 of auxiliary request 7 (corresponding to claim 1 of auxiliary request 6) was not clear because the term "unhandled" was vague and unclear (see decision under appeal, Reasons, point 20.1, page 11, first paragraph).
- 8.3 The appellant objected to the opposition division's conclusion. The definition of the word "unhandled" had a generally accepted meaning and was explained as being synonymous with "not embossed" throughout the description.
- 8.4 The board concurs with the opposition division's findings and the respondent's arguments. No evidence was filed on a possible generally accepted meaning of the term "unhandled" in the field of tissue paper products. Moreover, the fact that the person skilled in the art would have had to consult the description to figure out what the term "unhandled" in claim 1 could possibly mean, and what limitations it could imply, leads the board to the conclusion that the amendment of claim 1 according to auxiliary request 6 is not *per se*

clear.

- 8.5 The appellant essentially argued that a patent constituted its own dictionary and that the description consistently presented the term "unhandled" as meaning "not embossed".

In this regard, the board first observes that according to established case law of the boards of appeal, the claims have to be clear in themselves, without there being any need for the person skilled in the art to refer to the description (see Case Law of the Boards of Appeal of the European Patent Office, "Case Law", 9th edition, 2019, II.A.3.1). Also, the Enlarged Board of Appeal has emphasised that the meaning of claim features should be clear for the person skilled in the art from the wording of the claim alone (see G 1/04, OJ EPO 2006, 334, Reasons, point 6.2). While it is correct that, under exceptional circumstances, a patent may be its own dictionary, the use of the description and drawings in the examination relating to the clarity requirement under Article 84 EPC is limited. This is particularly the case if the unclear feature was meant to delimit the claimed subject-matter from the state of the art (see "Case Law", II.A.3.1 and II.A.6.3.5). In accordance with decision T 56/04 (see Reasons, point 2.10), the requirements of Article 84 EPC can exceptionally be considered met if the precise definition of a vague or unclear technical claim feature is unambiguously and directly identifiable by the person skilled in the art from the description but cannot be incorporated into the claim.

- 8.6 In the current case, the board acknowledges that throughout the description the term "unhandled" is equated with the term "not embossed" (see patent, such

as paragraphs [0045], [0050], [0051] and [0056])). However, this definition is only present in the description. The board sees no reason why it could not have been incorporated into claim 1 to clearly define the matter for which protection is sought. Under these circumstances, the lack of clarity of the wording of claim 1 cannot be rectified by the description potentially helping the person skilled in the art to understand the technical subject-matter that the claim was intended to define.

8.7 Conclusion on clarity of claim 1 of auxiliary requests 6, 7 and 9

Consequently, claim 1 of auxiliary request 6 does not fulfil the requirements of Article 84 EPC. This conclusion also applies to claim 1 of auxiliary requests 7 and 9, which also contains the unclear term "unhandled".

9. Auxiliary request 6', 7' and 9' - lack of clarity

9.1 Claim 1 of auxiliary requests 6', 7' and 9' has been amended by adding a feature in brackets " (i.e. unembossed)" after the term "unhandled". It is generally accepted that expressions put in brackets in a claim are not suitable for clearly defining the matter for which protection is sought and for limiting the scope of the claim. Thus, for claim 1 of auxiliary requests 6', 7' and 9', the same objections apply as for claim 1 of auxiliary requests 6, 7 and 9, respectively.

9.2 Conclusion on clarity of auxiliary requests 6', 7' and 9'

Claim 1 of auxiliary requests 6', 7' and 9' does not fulfil the requirements of Article 84 EPC.

10. Claim 1 of auxiliary request 8 - lack of inventive step over document D7 alone

10.1 It was not contested by the parties that document D7 formed a suitable starting point for assessing inventive step. The example tissue with five plies disclosed in the table on page 4 consists of two outer TAD plies and three inner CWP plies. Thus, the subject-matter of claim 1 of auxiliary request 8 differs from this example in that the structured ply is positioned and orientated with respect to the three wet pressed plies such that the structured back face of the structured ply is facing the three wet pressed plies to dampen a two-sidedness effect related to the structured back face. In fact, the only structural difference of the subject-matter of claim 1 from this example is that document D7 is silent about the orientation of the structured ply. Consequently, the subject-matter of claim 1 of auxiliary request 8 is not inventive over document D7 alone for the same reasons as explained above for the subject-matter of claim 1 of auxiliary request 1 (see points 2.2.1 to 2.2.4 above).

10.2 The subject-matter of claim 1 of auxiliary request 8 is directed to a hybrid multi-ply tissue having at least four plies. The hybrid multi-ply tissue with five plies of the example of document D7 (see table on page 4 of document D7) is covered by claim 1 because the claim does not exclude the presence of a second outer TAD ply

as in this example. Moreover, document D7 is not mainly directed to CWP, as argued by the appellant, since hybrid multi-layer tissues are explicitly mentioned in paragraphs [0133] and [0134]. In view of the fact that document D7 discloses specific examples of such tissues in the table on page 4 of document D7, the board cannot share the appellant's view that there is no specific teaching in document D7.

10.3 Conclusion on inventive step of the subject-matter of claim 1 of auxiliary request 8

The subject-matter of claim 1 of auxiliary request 8 is not inventive (Article 56 EPC).

11. Overall conclusion

The appellant failed to convince the board that claim 1 as granted is new and that the claims as amended according to auxiliary requests 1, 2, 3, 3', 4, 4', 5, 5', 6, 6', 7, 7', 8, 9 and 9' meet the requirements of the EPC. The appeal must therefore be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



N. Schneider

P. Lanz

Decision electronically authenticated