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# Datasheet for the decision of 15 October 2021

Case Number: T 0494/18 - 3.3.06

Application Number: 12305973.5

Publication Number: 2692948

D21H27/02, D21H27/30, IPC:

D21H27/00, B31F1/07

Language of the proceedings: ΕN

#### Title of invention:

Multi-ply tissue paper product and method for manufacturing the same

## Patent Proprietor:

SCA TISSUE FRANCE

#### Opponent:

Kimberly-Clark Worldwide, Inc.

#### Headword:

Manufacturing a multi-ply tissue paper/SCA Tissue France

#### Relevant legal provisions:

EPC Art. 56, 123 RPBA 2020 Art. 13(1), 25 RPBA Art. 12(4)

#### Keyword:

Late-filed auxiliary request 8 filed during the oral proceedings before the Board - admittance (yes) - formally allowable (yes) - inventive step (yes)

#### Decisions cited:

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T 2091/18, T 1480/16, T 2243/18, T 1792/19, T 1151/18, J 0014/19, T 0908/18, T 1224/15, T 1597/16, T 1439/16, T 0682/16, T 0168/16, T 0950/16, T 0715/16, T 1511/15, T 0032/16, G 0003/14
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#### Catchword:

A request in which some claims have been deleted compared to the requests that were filed previously with the grounds of appeal or the reply is, according to the systematic context of Article 12(3) RPBA 2020 and Article 13 RPBA 2020, a new request and thus usually amounts to an "amendment to the party's appeal case".



# 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 0494/18 - 3.3.06

D E C I S I O N

of Technical Board of Appeal 3.3.06

of 15 October 2021

Appellant: Kimberly-Clark Worldwide, Inc.

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Respondent: SCA TISSUE FRANCE

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 10 January 2018 rejecting the opposition filed against European patent No. 2692948 pursuant to Article 101(2)

EPC.

#### Composition of the Board:

Chairman J.-M. Schwaller
Members: G. Santavicca

J. Hoppe

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# Summary of Facts and Submissions

- I. The appeal lies from the decision of the opposition division to reject the opposition filed against European patent No. 2 692 948.
- II. With its statement of grounds the opponent filed new items of evidence D1a, D1b and D11 and maintained its objection of lack of inventive step based on D3a (US 2004/0168780 A1) or D4 (US 2009/0162597 A1) as representing the closest prior art. It also maintained that D10 (US 7 235 156 B2) was relevant against claims 9 and 10.
- III. In its reply, the patent proprietor (now respondent) requested that the appeal be dismissed, filed auxiliary requests 1 to 7 and requested that D10 not be admitted due to its late-filing in the opposition proceedings.
- IV. At the oral proceedings, which took place on 15 October 2021, the respondent submitted a new auxiliary request 8 comprising only method claims, and at the end of the proceedings, it withdrew the higher ranking requests.
- V. The appellant requested that this late-filed request not be admitted into the proceedings. If nevertheless it were admitted, inventive step of claim 1 was objected to on the basis of its arguments based on D3a or D4 in combination with D10 raised in the statement of grounds against the parameter features of granted claim 10, now defined in claim 1. Documents D1a, D1b, D11, D5, D5a and D6 were no longer invoked.

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The respondent argued as to why in its opinion auxiliary request 8 should be admitted. Regarding inventive step, it referred to its arguments in the reply to the appeal (point 7), in particular to the effect shown in figs. 5-8 and described in the patent ([0054]), but neither disclosed in D4 nor in D3a.

VI. The parties' final requests were as follows:

The appellant (opponent) requested that the decision under appeal be set aside and that the European patent be revoked.

The respondent (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained in amended form according to auxiliary request 8 filed during the oral proceedings on 15 October 2021.

#### Reasons for the Decision

- 1. Admittance of auxiliary request 8
- 1.1 This request, directed now exclusively to method claims, was filed for the first time during the oral proceedings before the board and differs from auxiliary request 4 in that the product claims have been deleted.
- 1.2 In the case at stake, the first summons to oral proceedings was notified before 1 January 2020 and the second after this date, following the cancellation of the originally scheduled oral proceedings. Thus, instead of Article 13(2) RPBA 2020, Article 13(1) RPBA 2020 and Article 13 RPBA 2007 are applicable (Article 25 RPBA 2020; T 950/16, reasons 3.2; T 715/16, reasons 2.2; T 1511/15, reasons 3). As the detailed wording in

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Article 13(1) RPBA 2020 reflects much of the case law developed under Article 13(1) RPBA 2007 (T 32/16, reasons 1.1.2 and 1.1.3), the assessment can be based on Article 13(1) RPBA 2020.

1.3 Article 13(1) RPBA 2020 is applicable in case of "any amendment to a party's appeal case filed after the grounds of appeal or the reply".

The method claims 1 and 2 of auxiliary request 8 correspond to claims 8 and 9 of auxiliary request 4. The new request is thus only distinguished from auxiliary request 4 (which had been filed already with the reply to the grounds of appeal) by the deletion of the product and use claims. In a first step it needs thus to be assessed whether this amounts to an "amendment of the party's appeal case" within the meaning of Article 13(1) RPBA 2020.

- 1.3.1 Some boards have taken the position that the deletion of method claims, product claims, dependent claims or alternatives in a claim request was not to be regarded as an "amendment to the party's appeal case" if the deletion does not change the factual and legal framework of the case (see for example T 1480/16, reasons 2.3; T 2243/18, reasons 2; T 1792/19, reasons 2; T 1151/18, reasons 2.1). The boards therefore concluded that the provisions of Article 13 RPBA 2020 were not to be applied at all ("non-applicability approach") if the deletion did not change the factual and legal framework of the case.
- 1.3.2 Other boards have taken the position that the deletion of such claims or alternatives was indeed to be regarded as an "amendment to the party's appeal case".

  Accordingly, they have applied Article 13 RPBA 2020 and

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assessed whether to admit the request in exercising their discretion in view of the criteria set out in Article 13 RPBA 2020, in particular in view of its impact on the factual and legal framework of the case (T 2091/18, reasons 4; T 1597/16, reasons 4; T 1439/16, reasons 2; T 1224/15, reasons 5; T 908/18, reasons 1; see also T 682/16, reasons 5 to 8; and concerning Article 13(1) RPBA 2007 see T 168/16, reasons 2.1 and 2.2). If the factual and legal framework was not changed, the boards admitted the new request.

With the latter approach, the factual situation (describing the actual conditions that must be met in order for the legal consequence to occur) and the criteria for applying the board's discretion as set out in Article 13(1) RPBA 2020 are clearly distinguished from each other and treated separately. It is assessed, in a first step, whether the new request is to be defined as an "amendment to the party's appeal case" (subsumption on the factual side of the provision). If so, in a second step of exercising the board's discretion for determining the legal consequences (admittance or non-admittance), the impact of the amendment on the appeal case, in particular the impact on procedural economy, is taken into account. Thus, the criteria for applying the board's discretion as set out in Article 13(1) RPBA 2020, including procedural economy, are only to be applied within the second step of determining the legal consequences.

1.3.3 In contrast to this two-step examination, the "non-applicability approach" anticipates a criterion of procedural economy ("change of the factual or legal framework"), and applies it to the first step of assessing the applicability of Article 13 RPBA 2020.

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In this respect it needs to be noted that the applicability of a provision — or the definition of an undefined legal term — does not fall under the discretion of a board. Rather, from a dogmatic point of view, discretion always relates to the legal consequences of a provision and not to the definitions of the terms used therein on the factual side of the provision. Thus, within the "non-applicability" approach, the board would not have any discretion when applying the criterion of "change of the factual or legal framework", although Article 13(1) RPBA provides that the criteria of procedural economy are to be examined within the framework of the board's discretion.

1.4 The present board decided to follow the approach set out under point 1.3.2 for the following reasons:

According to their wording, Articles 13(1) and 13(2) RPBA 2020 are both applicable to "any amendment to a party's appeal case". The provision as such however does not define what is to be regarded as an "amendment to a party's appeal case", it is thus an undefined legal term. An "amendment to the party's appeal case" is not identical to an amendment of the patent or of the patent application. Therefore, the provisions and decisions dealing with the latter (see for example G 3/14, OJ 2015, 102) and the definitions given in that context cannot be applied unchanged. However, the question of what can be defined as an "amendment to a party's appeal case", and with that the question of whether Article 13 RPBA 2020 is applicable, can be answered in the systematic context of the provisions guiding appeal proceedings (see also J 14/19, reasons 1.4). In this context, Article 12(3) RPBA 2020 provides that the statement of grounds of appeal and the reply

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shall contain a party's complete appeal case. Accordingly, all requests shall be specified expressly at this stage. It follows from this that only those requests that have been filed with a party's statement of grounds of appeal or the reply form part of a party's appeal case.

Consequently, a new request filed afterwards with a set of claims that is different to that of the previous requests, is usually to be regarded as an "amendment to a party's appeal case" within the meaning of Article 13 RPBA 2020. Following the systematic context of Articles 12(3) and 13 RPBA, a request in which claims have been deleted compared to the previous requests is therefore a new request and thus usually amounts to an "amendment to the party's appeal case" according to Article 13 RPBA 2020.

As a consequence, auxiliary request 8 is to be regarded as an amendment to the patent proprietor's appeal case and, in the case on file, the board does not see any reason to change this finding in view of normative considerations.

Thus, Article 13(1) RPBA 2020 is applicable in the present case and the admittance of auxiliary request 8 falls within the discretion of the board.

1.5 According to Article 13(1), third sentence, RPBA 2020 the party shall provide reasons for submitting the amendment at this stage of the proceedings.

The respondent argued that there was no indication in the preliminary opinion that the board would deny the inventive step of the product according to auxiliary request 4 (the sole request found to overcome the - 7 - T 0494/18

objections under Article 123(2) EPC). Therefore, the conclusion by the board in the oral proceedings, that the subject-matter of the product claims was obvious, was a new development. Further, the respondent had already indicated in its reply to the grounds of appeal that it was prepared to defend the method of manufacture of the product. Since, however, the method claims of auxiliary requests 5 to 7 were still objectionable under Article 123(2) EPC, it had sought to delete all product claims from the admissible auxiliary request 4 that had been discussed, the method claim of which was not objectionable under Article 123(2) EPC. This course of action was allowable even under the new rules of procedure, as apparent from T 1460/16.

1.6 The board, in exercising its discretion under Article 13(1) RPBA 2020, considered that the respondent had already indicated in its reply to the grounds of appeal that within its auxiliary requests 5 to 7 it was prepared to defend the method claims. Moreover, the appellant had already argued against granted claim 10, now incorporated into method claim 1. The closest prior art for the discussion of the opponent's sole objection against inventive step did not change. The additional comments of the parties in the oral proceedings for the assessment of inventive step merely specified their previous arguments based on D3a or D4 as closest prior art in combination with D10. Consequently, the parties did not raise new objections in this regard. Moreover, the board considered that the deletion of the product claims of auxiliary request 4 prima facie overcame all the objections discussed during the oral proceedings. The board also considered that the method of this new request was prima facie clearly allowable under Articles 123(2) and 56 EPC for the reasons given infra.

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- 1.7 Thus, exercising its discretion in view of the criteria set out in Article 13(1) RPBA 2020, including the impact of the amendment on the factual and legal framework of the appeal, the board admitted auxiliary request 8 into the appeal proceedings.
- 2. Auxiliary request 8 Amendments
- 2.1 Claim 1 of this request, compared to granted claim 8 on which it is based, contains the following amendments (highlighted by the board):
  - "18. A method for manufacturing multi-ply tissue paper product (1) comprising at least two plies (2, 3, 4, 5) made of tissue paper base-sheet, wherein the manufacturing method comprises:
  - manufacturing at least one outer ply as a structured outer ply (2, 4) produced by a structuring manufacturing method; characterized in that:
  - the manufacturing method further comprises microembossing the structured outer ply (2, 4) on
    substantially at least 80% of its surface during a
    converting operation, said micro-embossing step
    comprising adjusting a micro-embossing pressure applied
    to the structured outer ply (2, 4) such as to adjust a
    softness related property relatively to a strength
    related property of the structured outer ply (2, 4) in
    a defined range,
  - the structured outer ply (2, 4) is chosen among the group of structured ply comprising a through air dried ply produced by a through air drying TAD manufacturing method, or a dried ply produced by an advanced tissue molding system ATMOS, or a dried ply produced by a structured tissue technology SST manufacturing method, and

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- the structured outer ply (2, 4) is micro-embossed between a first cylinder (32) and a second cylinder (31) engraved with a microstructure pattern comprising a series of protuberances (7, 8, 9) having a density ranging from approximately 30 to 100 protuberances/cm<sup>2</sup>, and
- the micro-embossing pressure ranges from approximately 10 to 40 kg/cm linear such as to adjust the softness related property of the structured outer ply (2, 4) between approximately 83 and 87 according to measurements provided by an EMTEC tissue softness analyzer, and a machine direction strength MDT related property of the structured outer ply (2, 4) between approximately 90 and 130 N/m measured according to the standard EN ISO 12625-4:2005."
- 2.2 The board notes that the amendments identically correspond to the features of claims 9 and 10 as granted. The protection conferred by the patent has therefore not been extended.
- 2.3 Above claim 1 furthermore contains all the features of original claims 10 to 12, whereby original claim 11 refers back to original claim 10 and original claim 12 refers back to original claims 11 and 10. This combination of features is further restricted with the choice of all structured outer plies disclosed in paragraph page 4, lines 10-14 of the application as filed, which choice is not restricted to any specific embodiment but is of general applicability (as also apparent from original claim 2).
- 2.4 Dependent claim 2, which is the sole further claim of the request, is identical to original claim 13 (and to granted claim 11).

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- 2.5 It follows from the above considerations that the claims of auxiliary request 8 comply with the requirements of Article 123(2) and (3) EPC.
- 3. Auxiliary request 8 Inventive step
- 3.1 The patent (paragraph [0001]) concerns a method for manufacturing a multi-ply tissue paper comprising at least two plies made of tissue paper base-sheet.
- 3.2 The patent departs from well-known assumptions in the art in that in order to produce very soft multi-ply tissue paper products, for example toilet tissue comprising two TAD plies or TAD ply combined with one CWP ply, the TAD ply should be as soft and smooth as possible, should not be embossed or only as little as possible to preserve its properties, such as thickness and strength, in the converting operation, and furthermore was already structured as a consequence of the manufacturing process (one side of the TAD ply reproduced the structure of the fabric supporting the wet paper fibres). Providing the TAD ply with an additional pattern was therefore not considered desirable (see paragraph [0011]).
- 3.2.1 In order to achieve a TAD ply of high softness and suppleness it was commonly accepted that the strength of the TAD tissue (for a given grammage) could be reduced during the TAD manufacturing process (TAD papermaking machine), for example below 40N/m CDT or 110N/m MDT. Further, below a determined strength, breaks in the TAD tissue increased significantly during the TAD manufacturing process. This might even reach the point where it was no longer possible to produce the TAD tissue. Furthermore, it was possible to reduce the number of TAD tissue breaks by reducing the speed

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of production of the TAD tissue by the TAD papermaking machine. Furthermore, it was possible to increase the TAD tissue strength by increasing the grammage. However, these solutions were difficult to implement in the industrial production of TAD tissue without negatively affecting productivity and costs of production (see paragraph [0012]).

- 3.2.2 Thus, the prior art disclosed two main alternatives in order to microstructure a ply, namely by microembossing a classical CWP type ply or by manufacturing the ply by a TAD process (see paragraph [0016]).
- 3.2.3 In order to improve the suppleness and softness of multi-ply tissue products in an economical and costeffective manner (see paragraph [0017]), i.e. while at least maintaining productivity/cost of production of multi-ply tissue paper products comprising at least one TAD ply (paragraph [0018]), the patent ([0027] and [0028]) provides a method for manufacturing multi-ply tissue paper comprising at least two plies made of tissue paper base-sheet, comprising manufacturing at least one outer ply as a structured outer ply produced by a structuring manufacturing method, and further comprising micro-embossing the structured outer ply on substantially at least 80% of its surface during a converting operation, as defined in claim 1, whereby the micro-embossing step comprises adjusting a microembossing pressure applied to the structured outer ply such as to adjust a softness-related property relative to a strength-related property of the structured outer ply in a range as defined in claim 1.
- 3.2.4 This object has been achieved by micro-embossing the outer structured TAD ply during the converting operation, once dried after the tissue paper has been

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produced by the paper machine (see paragraph [0019]), as defined in claim 1 of auxiliary request 8.

- 3.3 Closest prior art
- 3.3.1 The appellant focused its arguments only on D4 or D3a taken as the closest prior art. As also accepted by both parties, the additional comments given by the parties during the oral proceedings in this regard merely specified the arguments previously set out.
- 3.3.2 Considering the similarities in terms of problems addressed in D4 (paragraphs [0006], [0008], [0015]) and D3a (paragraph [0009], last two sentences) and the solutions proposed (D4, paragraphs [0018] to [0033]; D3a, paragraph [0013], [0165], claim 15, figure 13), the board has no reason not to take both documents into account, although it considers D4 more relevant than D3a.
- 3.3.3 In the board's view, the closest embodiment of D4 is the method of [0128], the plies of the paper product obtained thereby being made using a CWP technique. According to D4, however, the method can be applied to a tissue paper product including at least an outer layer of a TAD ply, as disclosed in [0055], [0065], [0130] and [0132] to [0134] or claims 43 and 37, as actually specified in two of the inventive examples of the table on page 4 (embodiments 2TAD/1CWP/2TAD and 1TAD/3CWP/1TAD) of D4.
- 3.3.4 The multi-ply tissue of example 3 of D3a, in which is used the pattern embodiment illustrated in figure 13 and described in [0165] or claim 15, has been invoked by the appellant as having the claimed coverage, with its properties being summarised in table 7. The board

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is of the opinion that this example can be considered as the closest embodiment of D3a.

3.3.5 It is not in dispute that neither D4 nor D3a directly and unambiguously discloses a method using a <u>TAD</u> outer ply which is micro-embossed with the given density <u>on substantially at least 80% of its surface during a converting operation</u>, with a <u>micro-embossing pressure leading to the ranges of softness and machine direction strength values as defined in claim 1 at issue.</u>

## 3.4 Technical problem

At the oral proceedings the respondent maintained that there was no reason to reformulate the technical problem in view of D4 or D3a. The problem on that basis was thus to improve the softness of a multi-ply tissue paper product without a detrimental effect on its strength.

## 3.5 Solution

- 3.5.1 As the solution to the above problem, the patent proposes the method for manufacturing multi-ply tissue paper product of claim 1, which is characterised (vs the respective closest embodiments) in that it comprises at least two plies (2, 3, 4, 5) made of tissue paper base-sheet, wherein the manufacturing method comprises:
  - manufacturing at least one outer ply as a structured outer ply (2, 4)
  - further comprising micro-embossing the structured outer ply (2, 4) on substantially at least 80% of its surface during a converting operation, said micro-embossing step comprising adjusting a micro-embossing pressure applied to the structured outer ply (2, 4)

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such as to adjust a softness related property relatively to a strength related property of the structured outer ply (2, 4) in a defined range, - the structured outer ply (2, 4) being chosen among the group of structured ply comprising a through air dried ply produced by a through air drying TAD manufacturing method, or a dried ply produced by an advanced tissue molding system ATMOS, or a dried ply produced by a structured tissue technology SST manufacturing method, and

- the structured outer ply (2, 4) being micro-embossed between a first cylinder (32) and a second cylinder (31) engraved with a microstructure pattern comprising (only over example 3 of D3a) a series of protuberances (7, 8, 9) having a density ranging from approximately 30 to 100 protuberances/cm<sup>2</sup>, and
- the micro-embossing pressure ranging from approximately 10 to 40 kg/cm linear such as to adjust the softness related property of the structured outer ply (2, 4) between approximately 83 and 87 according to measurements provided by an EMTEC tissue softness analyzer, and a machine direction strength MDT related property of the structured outer ply (2,4) between approximately 90 and 130 N/m measured according to standard EN ISO 12625-4:2005.
- 3.6 Success of the solution
- 3.6.1 As such, the above technical problem can reasonably be derived from that formulated in paragraphs [0017] and [0018], account being taken of paragraph [0089] of the contested patent.
- 3.6.2 However, as neither D4 nor D3a was considered in the application as filed, the problem has to be reformulated on the basis of verifiable technical data

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provided in the patent specification showing the following technical effects of the distinguishing features:

- Figure 5 ([0050] to [0052]) shows the effect of the application of the particular micro-embossing pressures mentioned for a 80 protuberances/cm<sup>2</sup> pattern made on a TAD std and a TAD soft ply, compared to a reference without micro-embossing (having HF values of about 81, TAD std, and 84, TAD soft, at zero micro-embossing charge). It is apparent that, within the claimed pressure range from 10 to 40 kg/cm linear, the HF value is already much higher than the standard values at 10 kg/cm linear for TAD soft and at 20 kg/cm linear for TAD std. Then, a further, only small but still constant increase in HF up to the upper end of the claimed pressure range for TAD soft and a decrease for TAD std after 20 or 30 kg/cm linear is apparent. In any case, within the claimed pressure range, the HF values stably remain above 86 for TAD soft and above 84 for TAD std, i.e. well above the reference values. This implies that all claimed micro-embossing pressure values have a positive effect on the hand feel (HF), a measure of softness.
- Figure 6 ([0053]) shows that (still compared to HF values for TAD std or soft at zero charge) micro-embossing positively influences the HF without detrimentally affecting the machine-direction tensile strength (MDT). In fact, a MDT value above 90 N/m is obtained by micro-embossing a TAD soft ply to a HF value of >84 (reference value is 84) up to higher than 86, and a MDT value well above 100 N/m is obtained by micro-embossing a TAD std ply to HF values between 84 and 85, thus well above the reference value of 81. The graph also shows that, for the same range of HF values

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between 84 and 85, the micro-embossed TAD std ply has a greater MDT than the micro-embossed TAD soft ply.

- Figure 7 ([0054]) concerns TAD std plies (reference value is 81) and shows the effect of the various microembossing pattern densities chosen. Any pattern between 51 and 80 protuberances/cm<sup>2</sup>, if micro-embossed with the claimed pressures, stably produces (above 20 or 30 kg/cm linear) better HF values in the range 84-85.
- Figure 8 ([0055]) confirms the significant gain in softness (still measured as HF but by a blind test with consumers) obtained by maintaining the cross-direction machine tensile strength (CDT) at an acceptable value. However, the CDT values are not defined in claim 1.
- 3.6.3 Summing up, the data of the patent show that the claimed method allows a stable gain in softness to be obtained across the pressure range, as claimed, but over standard and soft TAD plies not micro-embossed. The data also prove that the claimed pressure, density, coverage, softness and strength are not arbitrarily selected.
- 3.6.4 The appellant argued that figure 5 of the patent showed an improvement merely for values between 10 to 20 kg/cm linear but not for higher values that also fell within the claimed range. Therefore, an improvement was not shown over the whole breadth of the claim. This is not convincing in the board's view, because the stagnation at a high level is still to be regarded as an improvement.
- 3.6.5 D4 already discloses the application of a method ([128] and [0134], claims 43 and 37) for micro-embossing two specific tissues comprising a TAD ply (see the table of

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[108] invoked by the appellant by analogy with the objections against the claimed product). However, the board notes that the two embodiments with outer TAD plies mentioned in the table of D4 have the following properties:

- an apparently <u>better</u> machine direction tensile strength measured according to the standard NF EN 12625-4 part 4 (see [0098]) (as is also the case in the patent, see [0053] and claim 1), namely (for 2TAD/1CWP/2TAD) 396 and (for 1TAD/3CWP/1TAD) 439 N/m, compared to the claimed 90 to 130 N/m values as claimed; but with reference to figure 8 of the patent, the only one using a scale which is at least somewhat comparable with that used in D4 (compare [0106] and [0107] of D4 with [0055] in the patent), an apparently <u>worse</u> softness value of 1.5 (for both embodiments), compared to well above 2 (2.1 to 2.3) in figure 8 of the patent.
- 3.6.6 The passages of D3a invoked by the appellant do not disclose specific embodiments with TAD plies and their respective properties. Therefore, no comparison at all is possible with the values defined now in claim 1 at issue in respect of the method claimed. However, considering that the softness in the example of the patent is better than that of D4, it can be concluded that the claimed method effectively solves the technical problem formulated by the respondent across the breadth of claim 1. Indeed, the technical problem was to provide a method for manufacturing multi-ply tissue paper products having improved softness without a detrimental effect on the strength.
- 3.7 Obviousness of the solution
- 3.7.1 The question which arises is whether the skilled person starting from D4 or D3a and faced with the above

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technical problem would have found motivation, without the benefit of hindsight, for converting/micro-embossing the TAD plies of the two embodiments of D4 (table) with a method as claimed, or for replacing the outer CPW ply or plies of example 3 of D3a with a TAD ply and for micro-embossing it with a method as claimed, with the expectation of obtaining a better softness without detrimentally affecting the strength.

- 3.7.2 Hence the question is whether the skilled person was motivated to use operating conditions as defined in claim 1 (density, <a href="coverage">coverage</a> and <a href="pressure">pressure</a>) when converting the TAD plies, in order to obtain the softness and strength properties as defined.
- 3.7.3 In this respect, the board notes that D4 only hints at micro-embossing one external surface of a ply (e.g. paragraph [0065]) with a density as claimed.

  Furthermore it hints at using TAD plies (see e.g. paragraphs [0130], [0133], particularly [0134], first sentence; claim 43, table of [0108]). Hence, only the provision of these measures appears to have been to hand for the skilled person starting from D4. However, D4 does not hint at a coverage as claimed, as apparent from figure 3, clearly not showing a very high coverage. Moreover, D4 neither discloses nor hints at the use of the claimed micro-embossing pressure, let alone for obtaining the defined results. Hence, D4 alone does not render obvious the claimed method.
- 3.7.4 D3a hints at micro-embossing (example 3, figure 13) one external surface of a CWT ply according to the converting process of figure 4. However, it does not disclose in its example 3 that a density, a coverage and a pressure as claimed are used, let alone on a TAD ply converted according to figure 4 (as disclosed in

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paragraphs [0008] and [0009], the method of D3a "can be used to make a TAD product"). Thus it is undisputed that D3a does not disclose the claimed values. In the statement of grounds (61), the appellant qualified the additional features of granted claim 10 (now in claim 1) as merely representing "a routine optimisation of the parameters for the embossing process". (The disclosure of D10 was invoked in that respect (see infra)). As D3a does not disclose the parameters for micro-embossing, let alone in a way permitting a comparison with the claimed parameters, it seems that from D3a, only the provision of TAD plies and microembossing in general was at hand for the skilled person. D3a definitely neither deals with nor hints at using a micro-embossing pressure as claimed, let alone for obtaining the defined properties. Moreover, the defined properties such as softness and strength are determined and expressed differently in D3a ([0108] and [0112] - [0129]). As a result, no comparison with the claimed values is possible. Hence, D3a alone does not suggest or render obvious the claimed subject-matter.

3.7.5 D10 was submitted just ahead of the oral proceedings before the opposition division. It was thus filed after the time limit of Rule 116 EPC mentioned in point 4 of the communication of 10 April 2017. The then invoked passage of column 8, lines 42-48, can be regarded as a response to the arguments given by the patent proprietor in its response dated 17 October 2017 (see in particular the points concerning novelty and inventive step). According to those arguments, none of the prior art documents cited thus far disclosed the claimed micro-embossing. However, neither the admittance of D10 nor the features relating to the roll linear pressure were addressed in the decision under appeal. Consequently, the board does not have a

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decision to review in respect of D10. On the other hand, as the micro-embossing roll linear pressure was part of the definition of claim 10 as granted, it is also apparent that D10 could and should have been submitted earlier with the notice of opposition. Since, however, D10 was filed before the opposition division, Article 12(4) RPBA 2007 is not applicable for non-admittance of the document. However, as a matter of fact, the board is anyway not convinced by appellant's arguments presented in writing and specified during the oral proceedings with regard to D10.

3.7.6 It follows from the above considerations that the skilled person would not have considered D10 and would not have combined it with D4 either to arrive at the claimed subject-matter (the latter requires a high coverage and a particular pressure range whilst obtaining better softness and maintaining strength at a good or acceptable level) for the following reasons:

D10 pertains to the technical field of paper products (column 1, lines 7-15), such as webs produced by TAD but formed with valleys (14, in fig.2) and ridges (12, in fig.2), leading to "nesting" (tighter packing) when the webs are used in multi-ply products. Therefore, D10 aims at inhibiting nesting in tissues (column 1, lines 39-40), which problem is solved by a method producing bridging regions (16) (see fig.2 of D10) in order to prevent "nesting". These regions are provided by embossing (D10 does not disclose micro-embossing) the web in rolls 45 (see fig.4), the web having ridges and valleys from its production. The pressure to be used in these embossing rolls is disclosed in column 8, lines 42-49 (passage invoked by the appellant in opposition proceedings, letter dated 6 December 2017, paragraph bridging pages 2 and 3 thereof), and ranges from 25 to

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300 pounds per linear inch (i.e. about 30 to 350 kg/cm linear). The actual values applied in the examples are however much higher than those in the overlapping range (i.e. 30 to 40 kg/cm linear), as example 1 uses a pressure of 75 pounds/linear inch (88 kg/cm linear), whilst the minimum pressure used in other examples is 50 pounds/linear inch (59 kg/cm linear) (tables 5, 6).

Summing up, even if D10 concerned <u>micro</u>-embossing (but this is not the case), it would not disclose that this is carried out in order to improve/maintain softness and strength. In any case, the embossing <u>pressure</u> values actually used in D10, if suitable for micro-embossing, would be outside the pressure range defined in claim 1 at issue.

Hence, notwithstanding the question of admittance, D10 is not relevant.

- 3.7.7 As none of D1a, D1b, D11, D5, D5a or D6 was used against the subject-matter of auxiliary request 8, there is no need to consider these documents.
- 3.7.8 It thus follows from the above that the skilled person starting from D4 or D3a would not have been motivated to modify the known methods of D4 or D3a in order to convert/micro-emboss and produce multi-ply tissue papers under the defined conditions, not even if D10 was considered, let alone be motivated to improve softness and maintain strength. Therefore, the subject-matter of the claims according to auxiliary request 8 was not obvious in the light of the known prior art and thus involves an inventive step under Article 56 EPC.
- 3.8 As the appellant has not succeeded in establishing that the subject-matter of the claims of this request does

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not meet the requirements of the EPC, the patent is to be maintained in amended form based on auxiliary request 8.

#### Order

# For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- The case is remitted to the opposition division with the order to maintain the patent in amended form based on the claims of auxiliary request 8 filed during the oral proceedings on 15 October 2021 and a description to be adapted where appropriate.

The Registrar:

The Chairman:



A. Pinna J.-M. Schwaller

Decision electronically authenticated