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**Datasheet for the decision  
of 24 January 2024**

**Case Number:** T 0395/22 - 3.3.06

**Application Number:** 14780610.3

**Publication Number:** 3041962

**IPC:** C14C11/00, C14C3/28

**Language of the proceedings:** EN

**Title of invention:**

TANNING PROCESS FOR PRODUCING LEATHER WITH HIGH ELASTIC  
PROPERTIES AND LEATHER OBTAINED

**Patent Proprietor:**

Kemas S.r.l.

**Opponent:**

Conceria Settebello S.p.A.

**Headword:**

Rubberising of leather/KEMAS

**Relevant legal provisions:**

EPC Art. 100(a), 56, 123(2)

RPBA 2020 Art. 12(4), 13(2)

**Keyword:**

Grounds for opposition - lack of patentability (yes)  
Inventive step - obvious alternative - auxiliary request (yes)  
Amendments - allowable (no)  
Amendment to case - amendment admitted (yes) - amendment  
within meaning of Art. 12(4) RPBA 2020  
Amendment after summons - exceptional circumstances (yes) -  
taken into account (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

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Case Number: T 0395/22 - 3.3.06

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.06**  
**of 24 January 2024**

**Appellant:** Conceria Settebello S.p.A.  
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**Decision under appeal:** **Decision of the Opposition Division of the  
European Patent Office posted on 11 November  
2021 rejecting the opposition filed against  
European patent No. 3041962 pursuant to Article  
101(2) EPC.**

**Composition of the Board:**

**Chairman** J.-M. Schwaller  
**Members:** S. Arrojo  
C. Heath

## Summary of Facts and Submissions

- I. The appeal from the opponent is directed against **the decision of the opposition division to reject the opposition against European patent No. 3 041 962**, claim 1 thereof reading as follows:

*"1. Tanning process comprising a rubberizing treatment in which during at least a wet phase of the tanning process there are elastomers in the treatment environment, characterized in that said elastomers are a polymer or a mixture of polymers belonging to the family of carboxylated thermoplastic elastomers, being in an amount of the dry weight of the product containing elastomers of at least 0.1% of the weight of the fresh salted leathers, or 0.5% of the weight of the wet shaved leathers, or 1% of the dry weight of said leathers."*

- II. In the statement of grounds of appeal, the appellant argued that the claims as granted were insufficiently disclosed, not novel in view of **D8 (Giovanni Manzo Chimica e Tecnologia del cuoio - Lineadue S.r.l. Marnate, 1999, pages 418-419)** and not inventive starting from D8 or from **D12 (US 2,949,335)** as the closest prior art. Dependent claims 2 and 3 were also not inventive in view of the same prior art.

- III. With the reply dated 28 July 2022, the patent proprietor and respondent defended the patent as granted (main request) and submitted amended sets of claims as auxiliary requests 1 to 3.

Claim 1 of **auxiliary request 1** corresponds to that of the main request, with the following amendments

(highlighted by the Board): "...of at least 1% by weight of the fresh salted hide, or to 5% compared to the weight of the wet shaved hide, or 10% compared to the dry weight ~~0.1% of the weight of the fresh salted leathers, or 0.5% of the weight of the wet shaved leathers, or 1% of the dry weight of said leathers~~".

Claim 1 of **auxiliary request 2** corresponds to that of the main request, with the following additional features: "*... wherein said elastomers are carboxylated forms of polymers belonging to the group R according to DIN ISO 1629, namely Acrylate Butadiene Rubber ABR, Butadiene Rubber BR, Chloroprene Rubber (Neoprene) CR, Isobutylene Isoprene Rubber (Butyl rubber) IIR, Chlorobutylene Rubber CIIR, Isoprene Rubber (natural rubber equivalent) IR, Nitrile Butadiene Rubber NBR, Hydrogenated Nitrile Rubber HNBR, Acrylonitrile Chloroprene Rubber NCR, Isoprene Rubber (natural rubber) NR, Pyridine Butadiene Rubber PBR, Styrene Butadiene Rubber SBR, Styrene Chloroprene Rubber SCR and Styrene Isoprene Rubber SIR.*"

Claim 1 of **auxiliary request 3** corresponds to that of the main request, with the following additional features: "*... wherein said elastomer is a mixture of elastomers selected from carboxylated chloroprene rubber (neoprene) (XCR), carboxylated isoprene rubber (XIR), carboxylated nitrile rubber (XNBR), carboxylated styrene butadiene rubber (XSBR).*"

IV. In a submission dated 24 October 2022, the appellant argued that the claims according to auxiliary request 1 extended beyond the content of the application as filed and did not overcome any of the objections formulated against the main request. Moreover, auxiliary request 2 was *prima facie* not allowable, because claim 3 extended

beyond the content of the application as filed. Furthermore, since claim 1 of auxiliary requests 2 and 3 corresponded respectively to the subject-matter of claims 2 and 3 as granted, the inventive step objections against these dependent claims in the grounds of appeal applied to these requests, which were therefore not inventive in view of the cited prior art.

- V. Following the board's preliminary opinion that the claims as granted did not meet the requirements of inventive step starting from D8 or D12 as closest prior art, auxiliary request 1 did not meet the requirements of Article 123(2) EPC and auxiliary requests 2 and 3 did not appear to overcome the inventive step objections, the proprietor in a submission dated 17 January 2024 filed documents D23 to D27 and auxiliary requests 4 and 5.

Claim 1 of **auxiliary request 4** corresponds to that of the main request, with the following additional features: *"... wherein said treatment environment is initially anionic at alkaline pH referred to the isoelectric point of the leather and after a minimum period of 15 min of rubberizing treatment said treatment environment is rendered acidic."*

- VI. At the oral proceedings, which took place by videoconference on 24 January 2024, the proprietor substituted auxiliary request 5 with **auxiliary request 5A**, claim 1 thereof corresponding to that of the main request, with the following additional features: *"...wherein said treatment environment is initially anionic at alkaline pH referred to the isoelectric point of the leather and after a minimum period of 15 min of rubberizing treatment said treatment environment is rendered acidic, wherein said rubberizing treatment*

*is followed by a treatment of vacuum drying with simultaneous pressing."*

Dependent **claims 2 to 11** according to this request correspond respectively to claims 3, 6 to 11 and 14 to 15 as granted.

VII. The parties final request were as follows:

The opponent-appellant requested that the decision of the opposition division be set aside and the patent be revoked in its entirety.

The proprietor-respondent requested that the appeal be dismissed, or, as an auxiliary measure, that the patent be maintained on the basis of one of auxiliary requests 1 to 3 filed with the reply to the appeal on 28 July 2022, or of auxiliary request 4 filed on 17 January 2024, or of auxiliary request 5A filed during the oral proceedings on 24 January 2024.

## **Reasons for the Decision**

1. Main request - Inventive step

The Board concluded that the opposition ground under Article 100(a) EPC in relation to Article 56 EPC prejudices the maintenance of the patent as granted for the following reasons:

1.1 As to the closest prior art, the appellant proposed document D8 or D12 as possible starting points for the inventive step argumentation.

1.1.1 Document **D8** discloses (see passage bridging pages 418 and 419) a tanning process comprising a rubberising

treatment with a styrene-maleic resin (i.e. a carboxylated thermoplastic) in an amount of 6 to 9% of the leather's dry weight.

Document **D12** discloses (see col. 1, lines 44-47 and col. 3, lines 6-9) a tanning process comprising a rubberising treatment in which, during a wet phase of the process, there are elastomers in the treatment environment. In particular, this document proposes (see col. 2, lines 6-10) to rubberise the leather with an elastomeric polymer obtained from a polymerisation emulsion prepared from vinyl compounds (e.g. styrene), either alone or with diene (elastomeric) compounds, such as (see example 2) a polymer obtained from butadiene, acrylonitrile and styrene (i.e. a thermoplastic elastomer) in order to improve the tear resistance of the leather.

- 1.1.2 The respondent argued that D8 was never cited as the closest prior art during first instance proceedings and requested that the objection starting from this document not be admitted at the appeal stage under Article 12(4) and (6) RPBA.
- 1.1.3 Whilst the Board considers that there is no reason to disregard D8 as a possible starting point, the present inventive step argumentation will start from document D12 as the closest prior art. There is therefore no need to address at this stage the question of the admissibility of the objection starting from D8.
- 1.1.4 The subject-matter of claim 1 differs from D12 in that the polymer used for the rubberising process is a carboxylated polymer.

1.2 As to the problem solved by the invention, according to the contested patent (see paras. [0022]-[0023]) it was known in the art to rubberise leather by adding an elastomeric polymer during the tanning process in order to impart certain mechanical properties to the leather. Exposing this rubberised leather to the drying step, particularly to vacuum drying with pressing, can lead to problems (see par. [0028]). The object of the patent is *inter alia* (see paras. [0029]-[0034]) to overcome these problems as well as to improve certain mechanical properties of the leather such as stitch-tear resistance and/or break grain resistance.

1.2.1 According to paras. [0040], [0042], [0082] and [0083] of the patent, by initially working with an anionic and alkaline bath, the rubberising carboxylated polymer does not precipitate and the penetration into the leather is promoted. Moreover, a subsequent acidification step gives rise to the formation of strong carboamide bonds between the leather and the elastomeric polymer, thus providing the desired high stitch-tear and grain resistance. This is in particular illustrated in examples 1 and 2, both of which include a treatment in an alkaline medium (ammonia) and a subsequent acidification step.

1.2.2 In view of these technical effects, the problems solved according to the patent are thus those presented in pars. [0029] to [0034].

1.3 As to the question whether, the problem underlying the invention has to be reformulated, in its preliminary opinion, the Board indicated that since claim 1 as granted did not define a drying or a pH adjustment step, the technical effects alleged in the patent and associated with these steps could not be taken into

account when formulating the problem solved by the invention.

- 1.3.1 The proprietor argued that the adjustments of pH for this type of polymers was standard and well known for the person skilled in the art, so there was no need to define this feature in claim 1. Moreover, the patent did not indicate that pH adjustments were essential, but simply that the formation of carboamide bonds was "influenced" by the treatment environment (see par. [0082]). Thus, the process according to claim 1 should be considered to provide an improved stich-tear resistance and break grain resistance of the leather as demonstrated by examples 1 and 2 of the patent. The advantages resulting from the drying process should also be taken into account, because even if not explicitly defined, wet tanning process implicitly included a drying step. The invention therefore solved the problems proposed in the patent (see paras. [0029] to [0034]).

The proprietor also filed documents D23 to D27 to demonstrate that the carboxylated groups promoted the penetration of the polymer into the leather, which led to improved leather properties (e.g. elongation at break, recovery of deformation under stress, shape memory, etc.). These results further showed a synergistic effect between the carboxylated groups and the elastomeric groups, in particular because the presence of both functional groups led to an improved elongation at cracking. Other effects to be considered were the improved solubility of the carboxylated polymers as described in par. [0069] of the patent and the simplification of the process due to the fact that the carboxyl groups made the addition of tanning agents unnecessary.

1.3.2 The Board disagrees with the above argumentation because the patent clearly indicates (see pars. [0042], [0082] and [0083]) that the penetration of the carboxylated polymer into the leather and the subsequent bond formation between the polymer and the leather result from the two above-mentioned pH adjustment steps (i.e. alkaline pH followed by acidification). Moreover, the penetration and fixation of the polymer is what ultimately imparts the desired elastomeric properties to the leather. This is confirmed in the newly filed document D25, which refers (see 1st page) to the "reversible crosslinking [of the carboxylated polymers] by pH switching".

The subject-matter of claim 1 furthermore does not specify that the pH is adjusted in any way. In fact, even if it were assumed that some pH adjustment would implicitly take place, there is no reason to conclude that the pH would be adjusted as proposed in the patent, rather than in other ways leading to different outcomes (e.g. a pH adjustment to promote the cross-linking of the polymer on the outer surface of the leather). Consequently, none of the effects directly or indirectly associated with the carboxyl groups (i.e. improved penetration, fixation and improved mechanical properties of the leather) can be considered to have been successfully achieved over the entire scope of claim 1.

The Board also notes that the effects related to the drying step would not be achieved either. Even under the assumption that a drying step is at least implicitly defined in claim 1, the advantages/effects discussed in the patent are limited to a specific type of drying step, namely vacuum drying with simultaneous pressing (see paras. [0027], [0028] and [0095]).

Furthermore, these advantages only apply to a leather rubberised with a process according to the invention, i.e. one in which the polymer penetrates into the leather and fixates thereto. Since neither the specific drying process nor the pH adjustment required for the penetration and fixation of the polymer are defined in the claim at issue, there is no basis to conclude that the effects associated with the drying step would be achieved.

The invention can also not be considered to simplify the process, because claim 1 does not exclude the addition of other products such as tanning agents. As far as the improved solubility is concerned, this is regarded as a trivial consideration for the person skilled in the art, who is aware of the chemical properties conferred by the different functional groups.

- 1.3.3 The Board therefore concludes that the invention does not provide any of the technical effects discussed in the patent. The problem proposed in the patent must therefore be reformulated in a less ambitious way, namely as the provision of an alternative tanning and rubberising process for leather.
- 1.4 As regards the obviousness of the solution, document D8 discloses (pages 418 and 419) a wet tanning process with a styrene maleic polymer (i.e. a carboxylated thermoplastic). This document teaches that the carboxyl groups form bonds with the chromium of the tanned collagen. More specifically, D8 teaches that when these polymers are used with an initial alkaline pH, penetration of the polymer into the leather is enhanced, and that a subsequent acidification promotes

the formation of bonds between the carboxyl groups and the leather.

1.4.1 The proprietor argued that there was no reason for the skilled person to consider using a carboxylated polymer in the process of D12. In particular, D12 taught away from the addition of carboxylated polymers, because the process described therein also included tannins (see claim 1), which would be incompatible with the carboxylic groups as they would form precipitated complexes which would not be able to penetrate the leather structure. Moreover, even if the combination of D12 and D8 was contemplated, this would not necessarily lead to a rubberising process with a carboxylated thermoplastic elastomer as defined in claim 1 at issue, but would more likely involve a process with a mixture of a thermoplastic elastomer as proposed in D12 and a carboxylated thermoplastic as proposed in D8. The invention was thus not rendered obvious by D12 combined with D8.

1.4.2 The Board is not convinced by the above arguments, because since the problem solved is that of providing an alternative tanning process, the skilled person would have a clear incentive to consider the teachings in D8, which is a handbook concerning leather technology in general and discussing tanning processes with polymeric resins in particular. It is also clear from D12, in particular from the passage in col. 2, lines 6 to 10, that this document contemplates tanning processes using different types of polymers produced by combining suitable monomers in order to impart the desired properties to the leather. In particular, butadiene (i.e. an elastomeric group) is combined with other monomers in order to achieve the effects associated with different functional groups. In other

words, a skilled person starting from D12 would be aware that the emulsions used to form the polymer for the rubberising step should be tailored in view of the effects of each functional group. Since D8 discusses the specific positive effects of the carboxyl groups, it is clear that a skilled person reading this document would contemplate adding this functional group to the emulsions in D12 when looking for alternatives.

As to the alleged incompatibilities between carboxylated polymers and tannins, the Board notes that no evidence has been presented to support the argument that tannins (in general) would invariably react to form complexes with carboxylated polymers. Moreover, as argued by the appellant, claim 1 at issue does not exclude the presence of tannins, so the invention would also encompass embodiments in which both tannins and carboxylated polymers are used. In any case, the Board considers that a skilled person reading D12 and D8 would recognise that both tannins and carboxylated polymers may play similar roles as they both include reactive groups which bind to the collagen in leather. Thus, if any incompatibility between both components were to occur, the skilled person would simply contemplate trivial alternatives such as substituting the tannins with the carboxylated polymers, controlling the operating conditions or concentrations to avoid undesired interactions and/or adding these substances at different stages of the process.

1.4.3 The Board thus concludes that the subject-matter of claim 1 as granted is obvious in view of D12 combined with the teachings of D8.

2. Auxiliary request 1 - Articles 123(2) and 56 EPC

- 2.1 The subject-matter of claim 1 of **auxiliary request 1** corresponds to that of the main request wherein the percentage of polymer added has been increased to "... *at least 1% by weight of the fresh salted hide, or to 5% compared to the weight of the wet shaved hide, or 10% compared to the dry weight of said leathers*".
- 2.1.1 As admitted by the proprietor, the passage cited as basis for this amendment (passage bridging pages 19 and 20 of the application as filed) does not refer to concentrations of "*at least...*" but to percentages "*equal to...*[the values defined in claim 1]". The proprietor argued that, notwithstanding the above difference, the skilled person would recognise that the concentrations in the original description referred to the bottom value of a range as defined in claim 1, because the examples in the patent used concentrations higher than those described in the passage of pages 19-20 of the application as filed.
- 2.1.2 As indicated in the preliminary opinion, the Board does not agree with this argumentation. The passage cited as a basis unambiguously describes concentrations "*equal to*" the values defined in claim 1. Converting these specific values into open-ended ranges clearly extends the scope of the invention beyond the application as filed, as there is no direct and unambiguous basis for defining these ranges. The values described in the examples would, at best (if no further objections of intermediate generalisation were raised), provide a basis for defining those specific values, but not for a range, let alone for the ranges defined in claim 1 at issue.
- 2.1.3 Auxiliary request 1 is therefore not allowable under Article 123(2) EPC.

2.2 Moreover, the Board also notes that the percentages used in D12 (namely 9% polymer with respect to the dry weight of the leather in example 2) are very close to those defined in claim 1 at issue (10% polymer with respect to dry weight of leather). As no specific technical effect is associated with this minor increase in the amount of polymer, the amendment is regarded as an arbitrary alternative with no inventive contribution. The subject-matter of claim 1 is thus also considered to be obvious in view of D12 combined with the teachings of D8.

3. Auxiliary requests 2 and 3 - Inventive Step

3.1 The subject-matter of claim 1 of **auxiliary request 2** corresponds to that of the main request, wherein the elastomers are further defined by means of a list of alternatives. One of the defined alternatives is a carboxylated styrene butadiene rubber.

Since D12 discloses combinations of dienes such as butadiene with other functional groups (see col. 2, lines 6-10 and example 2) and D8 discloses a carboxylated styrene thermoplastic, one straightforward alternative for the skilled person would be to conduct the rubberising process with a carboxylated styrene butadiene rubber. Therefore, the same arguments and conclusions presented for the main request apply to this request, which is thus not allowable under Article 56 EPC.

3.2 The subject-matter of claim 1 of **auxiliary request 3** corresponds to that of auxiliary request 2, wherein the elastomers are further restricted with respect to auxiliary request 2.

Since claim 1 still includes carboxylated styrene butadiene rubber as an alternative, the same arguments and conclusions presented for the main and second auxiliary requests apply to this request, which is thus no considered to be allowable under Article 56 EPC.

4. Auxiliary request 4 - Admittance

4.1 Since this request was filed on 17 January 2024, i.e. shortly before the oral proceedings, its admittance is governed by the provisions of Article 13(2) RPBA.

4.2 The appellant requested not to admit this request, as there were no exceptional circumstances which could justify filing this claim request at such late stage.

4.3 The Board however notes that, as argued by the proprietor, the decision not to allow the main and auxiliary requests 1 to 3 is based on arguments which were brought forward for the first time by the Board in its preliminary opinion, issued less than 2 months before the oral proceedings.

In particular, the Board developed its inventive step argument on the basis that none of the technical effects claimed in the patent were achieved, because the claim did not define the steps of pH adjustment or vacuum drying with simultaneous pressing.

4.4 The appellant argued that the omission of the pH adjustment had been already addressed in the grounds of appeal within the context of the discussion of Article 83 EPC. Moreover, the appellant had also argued that no evidence had been presented that the invention solved a specific problem with respect to D8 or D12.

4.5 The Board disagrees with the appellant, because the omission of the pH adjustment steps was never discussed within the context of inventive step. In particular, the appellant argued that the technical effects of the carboxylated polymers were implicit in the claim, and that consequently, the omission of the pH adjustment steps led to a problem of insufficiency of disclosure. The proprietor could not be expected to foresee that this argument would be presented in the discussion of the problem solved by the invention and that it would be decisive for the decision on inventive step. Moreover, no reference was made whatsoever by the appellant to the omission of the drying step, which also played a role in the negative conclusions on inventive step.

4.6 The new argumentation presented by the Board in its preliminary opinion is thus considered as an exceptional circumstance that justifies the late filing of auxiliary request 4 under Article 13(2) RPBA. The Board therefore exercised its discretion to admit this request into the appeal proceedings.

5. Auxiliary request 4 - Inventive Step

5.1 Claim 1 at issue defines the pH adjustment steps. As explained above, this feature is essential for promoting the penetration and the fixation of the carboxylated polymer into the leather.

5.2 Closest prior art and problem solved

5.2.1 In its written submissions, the proprietor argued that D8 had never been proposed as the closest prior art during first instance proceedings, so the inventive step objections starting from D8 (presented for the

first time in the grounds of appeal) should not be admitted under Article 12(4) RPBA. It also argued that D8 could not be taken as the starting point for the inventive step argument because the closest prior art should have the same or a similar purpose as the invention. Since D8 did not disclose a rubberising process, it could not be considered to represent the closest prior art.

- 5.2.2 As indicated at the oral proceedings, the admission of the late filed auxiliary request 4 justifies admitting the inventive step objection starting from D8 under Article 12(4) RPBA at least within the context of the discussion of auxiliary request 4.

The Board also finds that, contrary to the proprietor's arguments, D8 and the invention have similar technical purposes, since they both concern the treatment of leather with polymers in the wet phase of the tanning process. In fact, the only difference is the type of polymer used for the treatment, which is why D8 does not relate to a rubberising process (i.e. the concept of "rubberising" concerns the treatment of leather with a specific type of polymer, namely an elastomer). Document D8 is therefore considered to represent the closest prior art.

- 5.2.3 The proprietor argued that the carboxylation and the pH would provide synergistic effects which were not described in the prior art. In particular, pH adjustment alone was not sufficient to ensure penetration of the elastomer, which also required the presence of carboxyl groups. The proprietor further argued that D24 and D25 demonstrated that the improvement of mechanical properties (e.g. an improved elongation at break) when using a carboxylated

thermoplastic elastomer was enhanced when compared to the use of a non-carboxylated elastomer. This implied that the carboxylated and elastomeric groups provided a synergistic effect.

- 5.2.4 The Board however notes that document D8 explicitly discloses (see pages 418 and 419) that when the leather is treated with a carboxylated thermoplastic (styrene maleic) and the pH is first adjusted to be alkaline and then acidified, the penetration and fixation of the polymer to the leather are promoted. Since this essentially corresponds to the features and the effects of the carboxyl groups and the pH adjustment according to the invention, the only effects to be considered are those associated with the elastomeric groups.

In this respect, the Board does not contest that the presence of elastomeric groups in the polymer would impart certain mechanical properties such as an improved elongation at break or tear resistance. The problem solved by the invention is therefore to provide a process leading to a leather with improved mechanical properties, such as elongation at break, tear resistance or stitch resistance.

- 5.3 As regards the obviousness of the solution, the proprietor argued that the skilled person had no motivation to exchange the resin in D8 with an elastomer. Moreover, if an elastomer was contemplated, it would be added to the resin proposed in D8 rather than incorporating elastomeric groups into the polymer proposed in D8.

- 5.3.1 The Board disagrees therewith, because document D12 clearly teaches (see example 2) that a treatment with an elastomer results in improved tear resistance.

Moreover, the person skilled in the art is aware that each functional group confers mechanical properties which are closely related to the known mechanical properties of polymers including such groups. The skilled person would therefore realise when reading D12 that adding diene groups as proposed in D12 to the carboxylated polymer in D8 would represent an obvious way of enhancing those mechanical properties generally associated with such elastomeric groups. Finally, the Board also notes that, as explained above, the combination of different monomers in an emulsion to form a single polymer for the treatment of the leather is a trivial consideration, as this is what both D8 and D12 teach.

- 5.3.2 The Board therefore concludes that a skilled person starting from D8 and looking for ways of improving certain mechanical properties of the leather, such as the elongation at break, the tear resistance or the stitch resistance would, in view of the teachings in D12, contemplate including diene (i.e. elastomeric) groups in the carboxylated thermoplastic polymers of D8.

The subject-matter of claim 1 at issue is therefore obvious, and so not inventive under Article 56 EPC.

6. Auxiliary request 5A - Admittance

- 6.1 Since this request was filed during the oral proceedings before the Board, its admittance is governed by the provisions in Article 13(2) RPBA.
- 6.2 At the hearing, the opponent presented new objections under Article 123(2) EPC against claim 2 of the then

pending auxiliary request 5. This was the first time that this objection was raised in the proceedings.

- 6.3 Notwithstanding the fact that the contested features were also part of the higher ranking requests, including the claims as granted, the new objection was admitted under Article 13(2) RPBA, because the Board would have raised it ex-officio when examining the compliance of the late filed auxiliary requests 4 and 5 with the formal requirements of the EPC.
- 6.4 The admission of the newly filed objections under Article 123(2) EPC was considered to represent an exceptional circumstance, which justified the filing of auxiliary request 5A by the proprietor during the oral proceedings. The Board therefore exercised its discretion under Article 13(2) RPBA to admit this auxiliary request into the proceedings.
- 6.5 Auxiliary request 5A - Inventive Step
- 6.5.1 Claim 1 of this request defines the pH adjustment steps as well as the vacuum drying step with simultaneous pressing. As explained above, these features are essential for promoting the penetration and fixation of the carboxylated polymer into the leather and for achieving the effects associated with the drying step.
- 6.5.2 As regards the closest prior art, the board is of the opinion that any one of documents D8 or D12 can be considered to represent a valid starting point for the inventive step argumentation. For the sake of completeness, both alternatives would be assessed.
- 6.5.3 With respect to the problem solved by the invention, the appellant argued that the drying step did not

represent part of the solution but only part of the problem solved, as the patent simply described problems associated when rubberised leather was exposed to a drying step.

- 6.5.4 The Board agrees that the drying step defines the context in which the problem is solved, rather than the solution as such, but notes that this is still relevant for the determination of the problem solved. In particular, as discussed in pars. [0027], [0028] and [0095], the problems associated with the vacuum drying with simultaneous pressing are overcome by the rubberising step with the carboxylated elastomer thermoplastic and the pH adjustments, because the improved penetration and fixation of the polymer leads to a homogeneous distribution of the polymer, which facilitates a precise pressing and shaping of the leather during the vacuum drying phase with simultaneous pressing.

The invention is thus considered to solve the problem of achieving a precisely shaped rubberised leather.

- 6.5.5 As to the question whether or not the proposed solution is obvious, the board notes that even though, as concluded in the discussion of auxiliary request 4, achieving a good fixation and penetration was known from D8, there is no teaching either in D8 or in D12 that the leather rubberised with a polymer as defined in claim 1 at issue would be more effectively or precisely shaped during the specific drying step claimed. Reaching this conclusion would require an inventive capacity, as the skilled person would need to recognise the advantages of rubberising the leather with the combined elastomeric and carboxylic functional

groups within the limited context of leather exposed to vacuum drying with simultaneous pressing.

- 6.5.6 The Board thus concludes that the subject-matter of claim 1 was not obvious in view of D12 combined with D8 or of D8 combined with D12, and so involves an inventive step under Article 56 EPC.
- 6.6 Since the appellant did not submit any further inventive step objections against the additional claims, the Board has no reason to consider them as not meeting the requirements of Article 56 EPC.
7. The appellant did also not submit any other objection against the allowability of auxiliary request 5A. The Board also does not see any reason to present any objection ex-officio under Articles 83, 84 or 123 EPC. Auxiliary request 5A is thus considered to meet the requirements of the EPC.
8. The Board also notes that since the content of the late filed documents D23 to D27 was not decisive for the outcome of these proceedings, there was no need to discuss the question of their admissibility.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of auxiliary request 5A filed during the oral proceedings on 24 January 2024, and a description to be adapted where appropriate.

The Registrar:

The Chairman:



A. Pinna

J.-M. Schwaller

Decision electronically authenticated