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**Datasheet for the decision
of 15 January 2026**

Case Number: T 0264/24 - 3.2.05

Application Number: 16180441.4

Publication Number: 3141399

IPC: B44B5/02

Language of the proceedings: EN

Title of invention:

Improved process for producing metal moulds, such as sheets, cylinders and the like, provided with at least one structured surface and metal stamps obtained with this process

Patent Proprietor:

FLAI S.R.L.

Opponent:

HUECK Rheinische GmbH

Relevant legal provisions:

EPC Art. 54(1), 56, 83, 111(1), 123(2)
RPBA 2020 Art. 11

Keyword:

Added subject-matter (no)

Sufficiency of disclosure (yes)

Novelty (yes)

Inventive step (no)

Remittal to the opposition division (yes)

Decisions cited:

G 0001/03



Beschwerdekammern

Boards of Appeal

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Case Number: T 0264/24 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 15 January 2026

Appellant: HUECK Rheinische GmbH
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
19 December 2023 concerning maintenance of the
European Patent No. 3141399 in amended form.**

Composition of the Board:

Chairman P. Lanz
Members: O. Randl
B. Burm-Herregodts

Summary of Facts and Submissions

- I. The opponent filed an appeal against the opposition division's interlocutory decision on the version in which European patent No. 3 141 399 could be maintained in amended form.
- II. The opposition division was of the opinion that the ground for opposition under Article 100(c) EPC prejudiced the maintenance of the patent as granted and that the subject-matter of auxiliary requests 1 and 2 was anticipated or rendered obvious by the prior art. However, it found that auxiliary request 3 complied with the requirements of the EPC.
- III. The decision was based on the following documents:
- | | | | |
|----|-----------------------|----|-----------------------|
| D1 | EP 2 060 658 A2 | D2 | EP 2 497 650 A1 |
| D3 | EP 2 848 424 A1 | D4 | DE 10 2012 107 827 A1 |
| D5 | DE 20 2012 004 375 U1 | | |
- IV. With its reply to the appellant's statement of grounds of appeal, the respondent filed another document:
- | | |
|----|---|
| D6 | P. Walker et al. (ed.), "Handbook of Metal Etchants", CRC Press, Boca Raton, 1991, 1415 pages |
|----|---|
- V. The board issued a communication pursuant to Article 15(1) RPBA on 5 August 2025.
- VI. The oral proceedings before the board took place by videoconference on 15 January 2026.
- VII. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

- VIII. The respondent (patent proprietor) requested:
- that the appeal be dismissed,
 - alternatively, that the decision under appeal be set aside and the patent be maintained as amended on the basis of one of auxiliary requests 1, 2a, 2b (all filed with the reply to the statement of grounds of appeal dated 5 August 2024), 3a, 3b, 4a and 4b (all filed by letter dated 28 November 2024),
 - that the case be remitted to the opposition division for further prosecution.

IX. Claims 1 and 3 of the patent in the version the opposition division considered to comply with the requirements of the EPC read (for claim 1, the feature references used by the board have been inserted in square brackets; the words added to claim 1 of the application as filed are underlined):

"1. [1] Process for producing a metal mould (1)
[2] provided with at least one structured surface (2)
bearing a pattern or ornamental motif (3)
[3] obtained by applying, to the surface (10) of an
initial mould (4), a first protective layer (5) that
reproduces said pattern or ornamental motif (3) and
subsequently treating the surface thus prepared with a
corrosive substance
[4] suitable to create corroded portions (6), distinct
from the uncorroded portions (7) coinciding with said
protective layer (5), characterised in that
[5] it also provides applying, directly onto the
aforesaid uncorroded portions (7) of the surface (10)
of the mould (4), a second protective layer (8)
[6] and subsequent treating the said surface (10) thus
obtained with a matting substance, suitable to form a
structured surface (2) having corroded portions (6)

with a different degree of gloss to that of the aforesaid uncorroded portions (7),
[7] wherein said protective layer (5) is removed from said surface (10) of the mould (4) after said corrosive substance has been applied and
[8] said protective layer (8) is removed from said surface (10) of the mould (4) after said matting substance has been applied."

"3. Metal mould, characterised in that it has at least one structured surface (2) bearing a pattern or an ornamental motif (3) obtained with the process according to one or more of the preceding claims."

X. The parties argued as follows.

(a) Main request: added subject-matter

(i) Appellant

Feature 5: The original application did not contain the term "directly". The opposition division interpreted "applying directly onto" as meaning that there should be no intermediate layers between the second protective layer and the non-corroded structures. "Directly" could also mean that the non-corroded areas are not rounded off after deep etching before the second protective layer is applied. Fig. 3a to 3f of the application as filed are undisputedly schematic. However, these figures depict concave corroded areas (6) that are deeper in the middle than at the edges. Clearly, such anisotropy can only be achieved through additional measures that are neither shown nor disclosed. Therefore, the skilled person would understand that intermediate steps may be involved. Consequently, the presence of intermediate layers cannot be ruled out. This

teaching cannot be directly and unambiguously derived from these figures. Nor can any direct disclosure be inferred from the original description. Page 5, lines 16 to 18 does not rule out the possibility of an additional layer between the second protective layer and the non-corroded areas. Pages 2, lines 19 to 24 and page 3, lines 8 to 18 merely refer to it being possible for the surface of the finished metal casting mould to be made of the same material as its base. These passages do not address the application or removal of coatings and intermediate layers during the manufacturing process. There may be layers that are only temporarily present, as well as further intermediate steps such as polishing, cleaning, rounding off, or the mechanical or chemical activation of the surface of the non-corroded areas. Feature 5 therefore contravenes Article 123(2) EPC.

Feature 6: Although original claim 2 does not explicitly state that the second protective layer should be applied directly to uncorroded areas, it can be inferred that if it is applied over uncorroded areas, the corroded areas have to have a matt gloss finish. Omitting this restriction contravenes Article 123(2) EPC. It is incorrect to assume that the skilled person would necessarily conclude that a matting substance as mentioned in feature 6 would result in the non-corroded areas having a matt appearance. In the context of feature 6, an agent that results in a higher gloss can also be considered a matting substance. However, corroded areas with a higher degree of gloss than uncorroded areas are not originally disclosed. Therefore, feature 6, in combination with the amendments to feature 5, constitutes an inadmissible intermediate generalisation.

Features 7 and 8: These features do not specify which of the two protective layers mentioned in features 3 and 5 are removed, or when this occurs. They leave open the possibility that the first protective layer remains on the metal casting mould and is coated with the second protective layer, with both layers then being removed together after etching and matting. This would make the process very efficient. However, only the variant in which the second protective layer is applied after the first has been removed is disclosed (see page 5, lines 10 to 21 of the original description). The process steps do not necessarily follow the sequence of steps (3+4)-7-5-6-8, and the use of the word "directly" in feature 5 does not rule out the second protective layer being applied to the first. Feature 4 can be interpreted to mean that the non-corroded areas correspond to the areas of the first protective layer, i.e. that they are identical to and formed by it. In this case, feature 5 would mean that the second protective layer is applied to the first. Features 7 and 8 would then mean that the two protective layers are only removed together after they have been treated with the matting substance. This may make technical sense if the protective layers have different functions. Features 7 and 8 do not specify that the first protective layer has to be removed before the second protective layer is applied. Since applying the second protective layer to the first and subsequently removing both layers after matting treatment achieves the same technical result as the sequence proposed by the opposition division, this interpretation of claim 1 also makes technical sense. Therefore, the wording of claim 1 encompasses the sequence of steps (3+4)-5-6-(7+8), which was not originally disclosed. Consequently, the combination of features 7 and 8

constitutes an inadmissible generalisation, contrary to Article 123(2) EPC.

(ii) Respondent

Feature 5: Page 5, lines 10 to 21 of the original application discloses that the second protective layer is applied directly to the uncorroded portions resulting from the previous processing step (with "then" in line 17 indicating immediate succession). It is clear whether or not additional layers are present between the uncorroded portions and the second protective layer. The second protective layer (8) is applied immediately after the preceding processing step, i.e. directly onto the uncorroded portions (7). Fig. 3d and 3e, which are schematic, also support this. The appellant is attempting to reverse-engineer additional, undisclosed intermediate processing steps solely on the basis of the shape of the etching pits shown in a schematic illustration. However, neither the quoted passage nor the schematic illustrations provide any indication or incentive for the skilled person to presume that further layers (such as adhesion layers) or intermediate processing steps (such as round etching) are applied to the uncorroded portions before the second protective layer is applied. The fact that other documents dealing with the imitation of wood structures, such as document D5, use round etching does not mean that it is mandatory. The need for simplicity and cost efficiency may lead the skilled person to settle for imperfect imitations. For the same reason, pretreatments of the surface onto which the mask is applied are not mandatory. Feature 5 complies with Article 123(2) EPC.

Feature 6: Suggesting that matting a surface involves polishing it is a deliberate misinterpretation. It can only be interpreted as meaning that the matting substance reduces the gloss of a surface. Along with the specification of different gloss levels (see feature 5), this leads the skilled person to conclude that the corroded portions 6 will be less glossy than the uncorroded portions 7 when treated with the matting substance. The fact that dependent claim 2 specifies that the corroded portions have "a degree of matt gloss" does not necessarily make its subject-matter narrower than that of independent claim 1; it merely clarifies what is implicit in feature 6 in connection with feature 5. There is no unallowable intermediate generalisation.

Features 7 and 8: According to feature 5, the second protective layer 8 is applied directly onto the uncorroded portions 7 of the surface 10 of the mould 4. Therefore, the second protective layer is in direct contact with the surface, with no first protective layer in between. The appellant's interpretation is explicitly excluded by the claim. The drawings and description of the patent also confirm that the second protective layer is applied directly to the uncorroded portions once the first protective layer has been removed. From page 5, line 7 to page 6, line 2, it is disclosed that portion 7 of the initial sheet 4 corresponds to the area that was protected by the first protective layer 5. Fig. 3d shows that the first protective layer is absent before the second protective layer is applied (Fig. 3e). It would not make technical sense to put one protective layer on top of the other. Consequently, features 7 and 8 do not violate Article 123(2) EPC.

(b) Main request: sufficiency of disclosure

(i) Appellant

Claim 1 outlines the standard intermediate steps involved in producing any metal mould. The patent does not provide the skilled person with any information on feasibility. It only describes well-known intermediate steps. There are no specifications on how to obtain cost-effective and functional pressed sheet metal parts. In particular, the type of etching agent and matting substance used has not been disclosed. It is unclear which properties the matting substance has to have in order to create a matt finish on corroded areas. The entire description contains no examples of base materials, etching agents or matting substances. As claim 1 is not limited to a specific pattern, the skilled person does not know how to produce any given pattern in a single etching step (see paragraph [0002] of the patent). They are not taught, for example, how to produce the profiles shown in the figures of the patent, or a recess with a V-shaped depth profile instead of a round one. The depth profile of the recesses is crucial for achieving the desired pattern. Furthermore, it is unclear how the composition of the protective layers should be adapted according to the type of etching agent, matting substance or base material used. If feature 6 implies that a different degree of gloss can only be achieved through this process, then the same degree of gloss has to be present across the entire surface after process steps 3 and 4. However, achieving a uniform degree of gloss after deep etching requires further steps, such as polishing, grinding and applying additional layers. There is no widely accepted knowledge of an etching agent that produces a uniform gloss finish during deep

etching. Additionally, coordination between the etching agent, the first protective layer and the metal casting mould would eliminate the need to round etch the structures, with the desired structures being achieved in a single step. To obtain the subject-matter of claim 1, the skilled person would have had to identify a potentially suitable combination from a vast quantity of materials and substances, for which they would have had to conduct a research programme. This would constitute an undue burden, as also evidenced by the sheer size of document D6. The scope of protection of claim 1 is not proportionate to the actual disclosure.

When asked by the board whether the assertion that claim 1 did not provide sufficient guidance on how to achieve the effects specified in paragraph [0006] of the patent was a matter of sufficiency of disclosure or inventive step, the appellant confirmed that it was a matter of sufficiency of disclosure. The appellant argued that claim 1 merely extracts steps from the state of the art without explaining how these effects can be obtained.

(ii) Respondent

Rather than identifying a specific chemical compound for a chemical etching process, the invention aims to provide a "simpler, more reliable and less costly" process (see paragraph [0006] of the patent). It is neither necessary nor desirable to provide details of well-known ancillary features. Common technical knowledge provides details of a wide range of suitable corrosive substances and masking materials. Document D6 was filed as evidence in this regard; its size demonstrates the extent of common knowledge in this area. Selecting the appropriate corrosive substances

and the corresponding corrosion-resistant masking materials would not have placed an undue burden on the skilled person. Otherwise, all the prior-art documents used by the appellant to demonstrate a lack of novelty or inventive step would suffer from the same defect and could not be used against the patent. Selecting suitable substances forms part of the technical education of a skilled person, and given the vast number of options, it is generally neither necessary nor desirable to provide explicit examples; these are not provided in the cited prior art, which is presumed to provide enabling disclosure. The patterns are determined by the mask used rather than by the corrosive substance. The appellant's arguments regarding feature 6 are self-contradictory. The patent discloses the invention at issue in a manner sufficiently clear and complete for it to be carried out by the skilled person.

(c) Main request: novelty of the subject-matter of claims 1 and 3 over document D5

(i) Appellant

Document D5 anticipates the subject-matter of claim 1, including features 5 and 6. A second protective layer which partially covers the uncorroded areas anticipates feature 6. The area of the peaks covered during round etching can be considered uncorroded. In the embodiment mentioned in paragraph [0025] of document D5, the surface is polished and a mask is applied directly to it to give different areas of the surface structure different degrees of gloss (paragraph [0026]). No corrosion is involved in the polishing process. Thus, feature 5 is disclosed. If printed masks are used, there is no further layer between the surface

structures and the second mask (see paragraphs [0017] and [0030]). Post-treatment can consist of matting or polishing, and etching and sandblasting are particularly suitable (paragraph [0027]). The panel shown in Fig. 2 is the negative of the mould used to produce it. The peaks of the mould (i.e. the valleys 7 of the panel) are not subjected to any post-processing steps (see paragraph [0040]). They are covered with a mask during the post-processing of areas 8, 9 and 10. The skilled person would regard the peaks as uncorroded areas and the valleys as corroded areas. In view of paragraph [0027], they would realise that differences in gloss could be achieved through matting (see also paragraph [0028]). Thus, feature 6 is also directly and unambiguously disclosed. The removal of the second mask in accordance with feature 8 is implicit as there is no protective layer on the finished panel. The end product does not reveal whether the edges were rounded during the etching step or at a later stage in the process. Paragraphs [0014] and [0016] refer to the imitation of wood pores, but arbitrary patterns may also be generated (see the last sentence of paragraph [0031] of document D5). Round etching is not required for such structures. Therefore, document D5 directly and unambiguously discloses a pressed sheet with valleys and peaks that differ on account of the degree of gloss, as well as all the structural properties of the mould of claim 3.

(ii) Respondent

Document D5 discloses that the surface structure of a mould can be produced by first performing a deep-etching step (*Tiefenätzung*) followed by a further etching step (*Rundätzung*) to round off sharp edges. The surface is then polished and coated with a metal (see

paragraph [0016]). The metal coating can be glossy or matt (see paragraph [0019]). Feature 5 is not disclosed because the second protective layer cannot be applied to the rounded-off edges of the previously uncorroded portions. Paragraph [0031] does not clearly state that the round-etching step can be omitted. Furthermore, since the second mask is applied after the chromium coating (paragraph [0024]) or polishing (paragraph [0025]), it is not applied "directly" onto the uncorroded portions. Unlike cleaning, polishing structurally alters the surface. Paragraph [0028] of document D5 discloses two equally suitable options for varying the degree of gloss of the mould surface, and paragraph [0027] provides four equally suitable options for altering the gloss level of a surface. Thus, to obtain feature 6, a combination of elements needs to be extracted from two lists. To arrive at a mould according to claim 1, the skilled person would have had to: (1) omit the abrasive etching step to achieve a different surface structure from that shown in Fig. 2 of document D5; (2) omit the metal coating of the mould surface, contrary to the teachings of document D5; (3) select one of the two options in paragraph [0028] from the first list; and (4) select one of the four options in paragraph [0027] from the second list. This is not directly and unambiguously disclosed in document D5. As can be seen from Fig. 2 and paragraph [0040], the rounded edges are provided with a different degree of gloss in a subsequent processing step (reference 11), which is observable in the end product.

(d) Main request: novelty of the subject-matter of claims 1 and 3 over document D1

(i) Appellant

Document D1 anticipates the subject-matter of claims 1 and 3, including feature 5. Paragraph [0017] discloses the following steps: (1) application of a first mask to the surface; (2) chemical treatment of the masked surface to create a surface structure; (3) application of a second, precisely fitting mask to the treated surface; and (4) further chemical treatment of the surface to structure the pressed sheet (see paragraph [0018]). This second chemical treatment increases the difference in gloss between the valleys and peaks. Since feature 6 refers to the mould rather than to the plate produced from it, it is sufficient for the mould surface to exhibit different degrees of gloss resulting from deep etching. As the second mask is applied directly to the non-corroded areas that correspond to the first mask, i.e. the chemically treated surface, feature 5 is also disclosed in document D1. A skilled person examining the sheet in document D1 would not be able to identify the manufacturing processes used. Paragraph [0026] mentions that there may be one or more etching steps. Although chrome plating is mentioned, other surface treatments can be envisaged. Paragraph [0027] states that if a wood structure is to be simulated on the press plate 1 by etching, the raised areas 6 can be given a matt finish (implicitly disclosing the use of a matting substance), while the lower regions forming the wood pores can be given a higher gloss. Wood surfaces are not glossy. The description of surfaces 6 and the "lower-lying areas" in paragraph [0027] refers to the end product: the surfaces 6, which correspond to the valleys in the

pressed sheet 1 in Fig. 2, appear as raised surfaces in the end product. Therefore, the "lower-lying areas" have to correspond to the raised areas of the sheet 1 in Fig. 2. Consequently, the sheet in document D1 has areas with a higher degree of gloss and areas with a lower degree of gloss. The skilled person would consider the raised areas to be uncorroded and the valleys to be corroded. Even if two chrome plating layers (6 and 7) were present, the skilled person would still not be able to determine how the layer structure was achieved (see paragraph [0027]). In the case of the pressed plate in document D1, it cannot be ruled out that it was manufactured using a method according to claim 1. Due to its structural similarity, the plate in document D1 anticipates the subject-matter of claim 3.

(ii) Respondent

Document D1 does not disclose the use of a matting substance. Paragraphs [0017] and [0018] describe two consecutive chemical treatment steps, which are performed after a protective layer has been applied. The protective layers are described as "*passgenau*" (fitting). However, according to paragraph [0013], this merely indicates that the protective layers match the desired structure of the wood pores. Paragraph [0016] states that deep etching (*Tiefenätzung*) is followed by an additional etching step (*Rundätzung*) to round off any sharp edges. The second protective layer (8) cannot cover the rounded-off edges of the previously uncorroded portions (7). If any uncorroded portions remain after the second etching step, they will not coincide with the previous uncorroded portions. Therefore, document D1 does not disclose feature 5. The gloss variation described in paragraph [0027], which refers to the mould and not the

resulting panel, differs from what is claimed (the reference to element 6 appears to be erroneous). In any case, paragraph [0027] is ambiguous to the extent that its disclosure cannot be considered unambiguous regardless of how it is interpreted. Document D1 does not disclose that the valleys always have a different gloss level from the peaks. It is not suggested that suitable differences in gloss can be achieved through chemical treatment alone. Instead, document D1 associates such differences with the application of different chrome coatings (see paragraph [0017]). Consequently, feature 6 cannot be derived directly and unambiguously from document D1. The argument that a metal mould according to claim 3 could be produced by performing the following steps: (1) applying the first chrome coating such that all recessed portions previously etched into the mould are filled, producing a flat surface; (2) applying a protective coating coinciding with the now-buried protruding portions; and (3) applying the second chrome coating to the protected flat surface; is based on hindsight. Document D1 does not provide any direct or unambiguous disclosure, or any pointer or prompt, in this regard. In particular, filling the recessed portions etched into the mould with the chrome coating is contrary to the objective of document D1, in which the recessed portions form the desired wood structure. The subject-matter of claims 1 and 3 is new over document D1.

(e) Main request: novelty of the subject-matter of claim 3 over document D2

(i) Appellant

The opposition division was wrong to conclude that the subject-matter of claim 3 was new, since the press

plate described in document D2 lacks a structural feature corresponding to process feature 5. Furthermore, the presence of the first chrome layer (6) in the known press plate precludes feature 5. The reasons given for the lack of novelty over document D1 also apply to document D2, given the similarity of the press plates in documents D1 and D2.

(ii) Respondent

The appellant has wilfully misinterpreted claim 1 of the patent by equating the initial mould 4 with the etched, chrome-coated mould produced as an intermediate result in document D2 (i.e. after step 8 listed in paragraph [0017]). Feature 1 states that the metal mould 1 is the end product of the claimed process. Feature 2 adds that it is provided with a structured surface 2. Features 3 and 4 state that this structured surface is "obtained by" applying the specified masking and etching steps to surface 10 of the "initial mould (4)". Therefore, features 1 to 4 clearly specify that the surface structure 10 is not present on the initial mould 4 but is produced by the claimed process. This previously produced surface structure 10 serves as a reference for the direct application of the second protective layer 8 and treatment with the matting substance (features 5 and 6). When claim 1 of the patent is considered in light of the description and common general knowledge, the appellant's interpretation is not technically sensible. Even if this interpretation were adopted and the etched, chrome-coated substrate were considered to be the initial mould, any pre-existing surface structure would have to be disregarded in the subsequent process. Consequently, document D2 would still not disclose only treating the corroded portions with a matting substance (features 5

and 6). Therefore, the subject-matter of claims 1 and 3 is new over document D2.

(f) Main request: novelty of the subject-matter of claim 3 over document D3

(i) Appellant

The opposition division's view that the object according to claim 3 could not be produced using the method described in document D3 is unfounded since neither the metal casting mould of claim 3 nor the pressed sheet metal of document D3 reveals the manufacturing process. Ultimately, only their structural designs can be compared. The pressed sheet metal in document D3 has peaks and valleys (see Fig. 2). According to paragraph [0023], these may have different degrees of gloss. Even if it were accepted that a layer structure could be recognised in a cross-section of the pressed sheet metal from document D3 due to the application of different layers, this would not result in any structural differences with regard to the subject-matter of claim 3. That is because the manufacturing process according to the patent could also use a plate as the starting product, with individual metal layers being applied on top of each other and then removed in certain areas during the process. Therefore, there is no structural difference between the pressed sheet known from document D3 and the claimed mould. The structures are indistinguishable, meaning the skilled person would be unable to tell which process had been used to make the product. Consequently, the subject-matter of claim 3 is not new over document D3.

(ii) Respondent

Claim 3 defines a metal mould obtained using a process according to one or more of the preceding claims, as opposed to a panel that is stamped by the mould and exhibits only the surface structure of the mould as a structural feature. Therefore, when assessing patentability in view of the prior art, structural features that are only visible in a cross-sectional view of the mould also have to be considered, provided that these features result from the claimed process. Alternatively, or in addition, a microscopic analysis of the surface can be used to identify structural differences. Document D3 explicitly states that no etching-related processing steps are used (see paragraph [0024]). In other words, document D3 produces a mould by adding new layers of material on top of an initial mould. This differs from the mould produced according to claim 3 of the patent, in which material from the initial mould is removed by etching. These structural differences can be seen in a cross-sectional view of the moulds. The subject-matter of claim 3 is new over document D3.

(g) Main request: novelty of the subject-matter of claim 3 over document D4

(i) Appellant

The pressing tool manufactured according to document D4 has peaks and valleys that have different levels of gloss (see paragraph [0004]). The peaks may have a higher degree of gloss than the valleys (see paragraph [0022]). Therefore, the pressed sheet described in document D4 has all the structural features of the subject-matter of claim 3 according to auxiliary

request 3 and is structurally identical to it. The structures are indistinguishable, meaning that the skilled person would be unable to tell which process had been used to make the product. Consequently, the subject-matter of claim 3 is not new over document D4.

(ii) Respondent

The assertion that it would not be possible to see how the product of document D4 was moulded and that it would therefore be indistinguishable from the mould according to claim 3 is incorrect. Differences in the manufacturing process can be identified in the resulting mould. Document D4 discloses laser treatment rather than etching portions of the surface to reduce the glossiness. A microscopic analysis of the surfaces of the resulting moulds reveals the structural differences between a laser-treated surface portion (see claim 1 and paragraphs [0013] to [0015] of document D4) and a surface portion treated with a matting substance (features 5, 6 and 8). Furthermore, document D4 discloses that melting the surface with a laser reduces roughness, thereby increasing gloss (see paragraph [0014]). However, document D4 only discloses this laser treatment for the recessed portions of the mould (see paragraph [0022]). Therefore, document D4 discloses that the recessed portions have a higher degree of gloss than the protruding portions, which is the opposite of feature 6. Therefore, the subject-matter of claim 3 is new over document D4.

(h) Main request: novelty of the subject-matter of claim 1 over document D2

(i) Appellant

Considering the sequence of steps disclosed in paragraph [0017] of document D2, the subject-matter of claim 1 is not new over document D2 either, for the same reasons as given above regarding the lack of novelty over document D1.

(i) Main request: inventive step of the subject-matter of claims 1 and 3, starting from document D5

(i) Appellant

Starting from document D5, the subject-matter of claim 1 would have been obvious to the skilled person. The opposition division's view on the only feature it deemed not obvious (feature 5) is incorrect. The patent drawings depict round-etched structures. Round etching is typically used when producing press plates for creating panels with wood-imitation surfaces, with the aim of achieving a realistic representation of wood. Paragraph [0002] of the patent also indicates the intention to imitate wood surfaces. There are no special requirements for the texture of the areas of the press plate that correspond to the valleys in the finished material plate. That is why these areas are not usually rounded. Therefore, the skilled person would understand "rounding" to mean that the valleys of the press plate are rounded. When rounding the press plate, the skilled person would realise that the raised, non-corroded areas which will not be exposed to the round-etching process and which will later form the valleys in the material plate have to be covered. These

covered areas correspond to the areas 4 onto which the second mask is applied directly in order to rework areas 9, 8 and 5. Feature 6 does not require the areas 4 to be fully covered by the second protective layer. Therefore, feature 5 is at least suggested to the skilled person. According to paragraph [0031], the number of etching steps required depends on the structure to be reproduced. However, if artificial graphic structures are to be generated, round etching is not necessary as it is only used to realistically reproduce wood pores (see paragraph [0016]). If a different structure is to be reproduced, there is no reason to perform round etching. Furthermore, reproducing a wood pore with sharp edges merely results in a less natural, low-quality reproduction, i.e. an inferior embodiment of document D5. According to established case law, any such embodiment is to be regarded as non-inventive.

The subject-matter of claim 3 is not inventive in view of document D5 either. Even if it were accepted that the recesses in the press plate have a lower gloss level than the raised areas - which does not follow directly and unambiguously from the press plate described in paragraph [0040] of document D5 - paragraph [0028] suggests that the valleys of the press plate may have a lower gloss level than the peaks. In light of the overall disclosure of document D5, a skilled person would have realised that the raised areas may have a higher gloss level than the lower areas and would have designed the press plate accordingly. See the above arguments regarding claim 1 for details on the omission of the round-etching step.

(ii) Respondent

Claims 1 and 3 relate to subject-matter involving an inventive step over the cited prior art. Distinguishing features 5 and 6 enable a structured surface to be obtained from the same material as the base mould. This eliminates the need for auxiliary material coatings and enables a simpler, more reliable and less costly process for producing a metal mould (paragraphs [0006] and [0007] of the patent). The objective technical problem is to reduce the complexity and cost of producing a metal mould with a structured surface featuring glossy, uncorroded areas and matt, corroded areas. To arrive at the solution of claim 1, the skilled person would need to adapt the teachings of document D5 as follows:

(1) omit the abrasive etching step (*Rundätzen*), which produces a different surface structure from that shown in Fig. 2 of document D5; (2) omit the application of a metal coating to the mould surface, contrary to the teaching in document D5 that metal coating is preferable; (3) select one of the two options in paragraph [0028] so that the protruding portions have a higher gloss than the recessed portions; and (4) select one of the four options in paragraph [0027] so that the recessed portions are etched to decrease their gloss. Paragraph [0017] of document D5 would have instructed the skilled person tasked with solving the aforementioned problem to apply metal coatings to the mould surface. This would have led them away from the claimed solution. The last sentence of paragraph [0031] only refers to the frequency of mask application and processing operations, not substantive changes such as the omission of a step. Regarding paragraph [0016] of document D5, it should be noted that pore structures are not exclusively relevant to wood imitations. Stone

surfaces also have pores. Downgrading the quality of reproduction is not a measure without technical effect; omitting the round-etching step improves cost efficiency. Furthermore, documents D1 and D2 do not disclose features 5 and 6 of claim 1. Therefore, neither D5 nor any of the other cited prior-art documents provide any pointer or prompt for the skilled person to make the above considerations (1) to (4). Regarding claim 3, microscopic analysis can distinguish between chemical abrasion and polishing or sand blasting, the latter of which leaves grinding marks.

(j) Remittal to the opposition division

(i) Respondent

The respondent requested that the case be remitted to the opposition division for further prosecution.

(ii) Appellant

When asked by the board, the appellant stated that it did not oppose remittal of the case.

Reasons for the Decision

1. Claim interpretation

1.1 Feature 4

Feature 4 requires the corrosive substance to create "corroded portions that are distinct from the uncorroded portions and coincide with the protective layer".

The board does not endorse the interpretation that the uncorroded areas can be identical to and formed by the first protective layer. The skilled person's interpretation of feature 4 is that the protective layer protects the regions it covers from the effect of the corrosive substance, ensuring they remain uncorroded. Consequently, the uncorroded portions coincide with the portions covered by the protective layer in terms of area and position but are not identical to or formed by the protective layer itself.

1.2 "Applying directly onto" (feature 5)

Feature 5 requires the claimed process to provide "applying, directly onto the uncorroded portions of the surface of the mould, a second protective layer".

The skilled person would understand this to mean that the protective layer has to be applied to the uncorroded portions of the mould surface such that the layer and those portions are in direct contact - there must be nothing between them, in particular no other layer.

This understanding is derived not only from the adverb "directly" but also from the preposition "onto". A layer applied to a layer deposited on the uncorroded portions is not applied directly onto them.

However, this does not exclude any treatment of the uncorroded surface in the interim. For example, if the protective layer is applied to the uncorroded portions after cleaning, it is still applied directly to these portions because cleaning does not modify the uncorroded portions or generate an intermediate layer

that would prevent the protective layer from contacting the uncorroded portions.

For the same reason, feature 5 does not exclude an intermediate polishing treatment. Claim 1 is based on the distinction between corroded and uncorroded areas. The polishing treatment does not generate an intermediate layer on the uncorroded portion or corrode its surface. The portions onto which the second protective layer is applied remain uncorroded.

The board is unable to endorse the view that feature 5 allows the second protective layer to partially cover the uncorroded portions. The wording of the feature does not suggest partial coverage. Furthermore, according to feature 6, the matting treatment is intended to modify the gloss of the corroded portions rather than parts of the uncorroded portions.

1.3 Different degree of gloss (feature 6)

Feature 6 requires the process to comprise a step in which the mould surface is treated with a matting substance to create a structured surface with corroded areas that have a different gloss level from the uncorroded areas.

The feature only requires the matting substance to be suitable for achieving this difference in gloss. This does not mean that the entire surface has to have the same degree of gloss prior to this step.

1.4 Portions covered by the first/second protective layers

Feature 5 requires a second protective layer to be applied to all uncorroded portions introduced in

feature 4. This means that the entire uncorroded surface is covered by the second protective layer. As the uncorroded surface was covered with the first protective layer during the corrosion step, the surface covered by the second layer is the same as that covered by the first layer beforehand.

1.5 Order of the steps

The step of feature 5 has to occur after features 3 and 4 because the presence of corroded and uncorroded areas indicates that corrosion has taken place. The step of feature 6 necessarily follows the step of feature 5 because this is expressly stated by feature 6. The question arises as to when the steps according to features 7 and 8 should occur. The step of feature 7 cannot occur before the steps of features 3 and 4 as the protective layer has to be applied first. It has to occur before feature 5, otherwise it would not be possible to apply the second protective layer directly to the uncorroded portions. The step of feature 8 has to occur after feature 5 because the second protective layer has to be applied before it can be removed. Furthermore, it has to occur after feature 6 as the purpose of the second protective layer is to prevent the matting substance from acting on the entire surface. Therefore, the claimed order of the steps (identified by their feature reference) is:
(3+4)-7-5-6-8.

The appellant's view that steps 7 and 8 can occur simultaneously is incompatible with the interpretation of features 4 and 5 outlined in points 1.1 and 1.2.

2. Main request: added subject-matter (Article 123(2) EPC)

2.1 Feature 5

According to feature 5, the claimed process has to comprise a step in which a second protective layer is applied directly to the uncorroded areas of the mould's surface. For the board's interpretation of this feature, see point 1.2 above.

This feature was not present in claim 1 of the application as filed, which only required the process to comprise a step involving the application of a second protective layer to the surface of the mould.

The examining division suggested introducing a reference to directly applying the layer to the surface, and this was adopted by the respondent (see section 2.1 of the examining division's communication dated 5 March 2020, and the first paragraph on page 2 of the respondent's response dated 17 April 2020). No support for this was given in the application as filed.

The opposition division found that the amendment complied with the requirements of Article 123(2) EPC (see the first paragraph of section 11.3.3 of the decision under appeal). The board reaches the same conclusion for the following reasons.

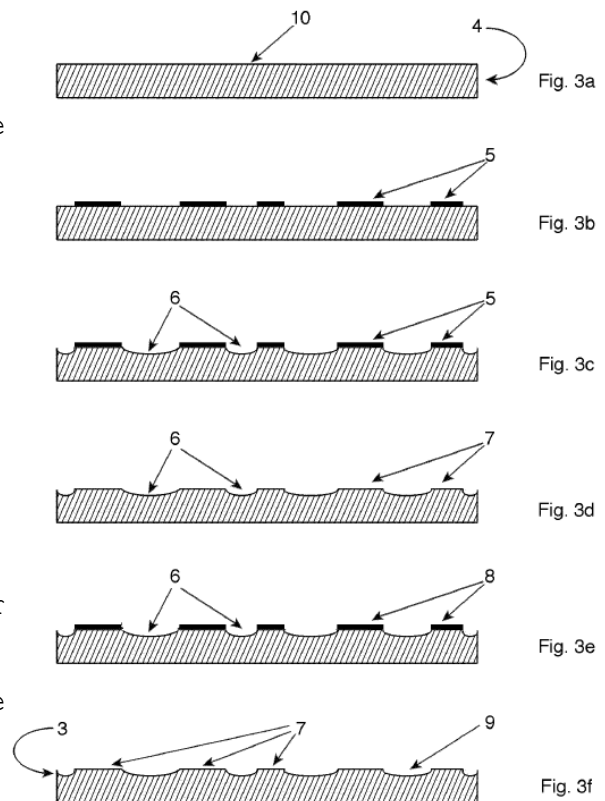
The board is satisfied that Fig. 3b to 3f of the application as filed, together with the corresponding description, provide support for feature 5.

These drawings demonstrate that the protective layer 5 is applied to the surface 10 of the sheet 4. Neither the drawings nor the description depict or indicate the presence of an intermediate layer. Page 5, lines 16 to 18

mentions the application to the uncorroded portions 7 of the sheet. The most straightforward interpretation of this passage is that the application is direct.

A skilled person would not deduce the existence of further steps or layers from the depiction of corroded portions 6 in Fig. 3c to 3f. It is not credible that they would interpret the anisotropy of the corroded portions depicted in these figures as indicating multiple etching steps. As the patent does not address the specifics of the etching process, such details cannot be inferred from its schematic drawings.

The fact that the invention can be used to create wood-grain patterns (see page 1, lines 10 to 16 of the original application) would not lead the skilled person to a different conclusion. The need for multiple



etching steps to faithfully imitate wood pores is not obvious to the skilled person, particularly since the original application does not address the imitation quality.

Therefore, the board concludes that feature 5 complies with the requirements of Article 123(2) EPC.

2.2 Feature 6 in combination with feature 5

Feature 6 defines a subsequent step in which the mould surface is treated with a matting substance to create a structured surface with corroded portions that have a different degree of gloss from the uncorroded portions.

The appellant's main objection is that the phrase "so as to obtain corroded portions with a degree of matt gloss", which was included in original claim 2, has been omitted. In its view, this constitutes an inadmissible intermediate generalisation.

The opposition division did not consider this objection to be well founded. In section 11.3.3, third paragraph of the decision under appeal, it is stated that feature 6 specifies that the mould surface not covered by the second protective layer is treated with a matting substance. This results in the corroded portions having a different degree of gloss from the uncorroded portions that are covered by the second protective layer. The skilled person would understand that the purpose of a matting substance is to make the treated surface less glossy and that the corroded, matt-treated portions would be less glossy than the untreated portions. Thus, the opposition division considered the allegedly missing feature to be implicit in claim 1.

The appellant contends that treatment with a matting substance does not necessarily lead to a difference in gloss between corroded and non-corroded areas. Feature 6 merely requires the corroded portions to have a different degree of gloss, including a higher gloss. However, the latter is not originally disclosed.

The board does not find this argument convincing because the appellant interprets the term "matting" in a way that seems contrary to its actual meaning. Polishing does not constitute a matting treatment. The skilled reader of claim 1 would understand that a corroded surface treated with a matting substance is less glossy than uncorroded portions.

Incidentally, it is not decisive that, in light of the above interpretation of claim 1, claim 2 is possibly redundant. When drafting a patent application, it may be desirable to include dependent claims that explicitly state an aspect that is only implicit in the claim on which they depend. Such claims may provide a fallback option in cases where a court rules that the feature is not implicit in the independent claim.

Thus, the objection to feature 6 is unfounded.

2.3 Features 7 and 8

These features require the protective layers to be removed from the mould surface after the corrosive substance (feature 7) and the matting substance (feature 8) are applied.

The appellant considers that adding features 7 and 8 to claim 1 violates Article 123(2) EPC as these features do not specify which of the two protective layers

mentioned in features 3 and 5 are removed or when this occurs. Claim 1 encompasses the case in which the first protective layer remains on the metal casting mould, is coated with the second protective layer and is then removed with the second protective layer after etching and matting.

The opposition division rejected this objection in the second paragraph of section 11.3.3 of the decision under appeal, pointing out that, by definition, the uncorroded portions are those on which the first protective layer was applied. The first protective layer has to be removed before the second protective layer is applied, otherwise the second protective layer cannot be applied directly to the uncorroded portions. Consequently, the step defined in feature 7 has to be carried out before the second protective layer is applied according to feature 5, and the method step defined in feature 8 has to occur after the step of feature 6. The claimed order of the steps (identified by their feature references) is: (3+4)-7-5-6-8, corresponding to the description on page 4, line 23 to page 6, line 2 of the application as filed.

The appellant's counter-argument is based on an interpretation of feature 4 which the board cannot endorse (see points 1.2 and 1.5 above). Furthermore, the objection is incompatible with the board's interpretation of feature 5 and the sequence of the claimed steps (see points 3 and 4 above). Thus, the board judges this objection to be unfounded.

2.4 Conclusion regarding added subject-matter

The main request complies with the requirements of Article 123(2) EPC.

3. Main request: sufficiency of disclosure (Art. 83 EPC)

In section 15.3 of the decision under appeal, the opposition division concluded that the patent disclosed the claimed process in a manner sufficiently clear and complete for it to be carried out by the skilled person. The opposition division noted that protective layers and corrosive and matting substances were generally known in the field of technology. It stated that, given their common general knowledge, those skilled in the art would have been able to carry out the claimed method and, in particular, select suitable compositions for the protective layers and the corrosive and matting substances. The board has reached the same conclusion for the following reasons.

The claimed invention does not reside in the nature of the etching agent or matting substance used, or in the composition of the protective layers. To carry out the invention on a particular surface, the skilled person has to find appropriate materials, which is within their capabilities.

The assertion that the skilled person would not know how to achieve the effects described in paragraph [0006] of the patent using the process according to claim 1 is irrelevant under Article 83 EPC. As established by Enlarged Board of Appeal decision G 1/03 (point 2.5.2 of the reasons), if an invention lacks reproducibility because the technical effect expressed in the claim is not achieved, this results in insuffi-

cient disclosure, which must be objected to under Article 83 EPC. If the desired technical effect is not expressed in the claim but is part of the problem to be solved, there is a question of inventive step. Claim 1 does not mention the effects that are allegedly obtained. Therefore, the question of whether the skilled person would know how to obtain these effects may be relevant when examining inventive step, but it is not relevant when examining sufficiency of disclosure.

The crucial question is whether the skilled person can carry out the process defined in claim 1. In the board's view, they can. Neither providing masks, nor the etching steps themselves, nor the specific order of these steps would have presented the skilled person with unsolvable problems or necessitated a research programme. (Incidentally, the appellant's assertion that the claimed process amounts to a selection of well-known steps confirms this conclusion.)

The fact that certain patterns cannot be obtained in a single etching step is not decisive, as the claim neither affirms this nor implies that this is the case. The board cannot endorse the view that the skilled person would have to be able to implement all imaginable patterns just because a pattern is mentioned in claim 1. If the skilled person is capable of applying to the mould surface a first protective layer that reproduces a pattern or ornamental motif, then this aspect is sufficiently disclosed. Examining sufficiency of disclosure should not involve considering specific, exotic cases which the skilled person would be unable to put into practice. In the board's view, if this approach were adopted, virtually all claims would be deemed insufficiently disclosed.

Furthermore, it is not possible to infer a lack of disclosure from the fact that the document expressing the skilled person's common general knowledge is so extensive that they would have difficulty finding the relevant information. It is established case law that manuals such as document D6 express the skilled person's common general knowledge. This is a legal fiction intended to create legal certainty regarding what can be considered common general knowledge, regardless of whether any real person masters the entire content of any such manual or how long it would take them to find a particular piece of information in it. Therefore, the skilled person has to be considered to be familiar with the content of manuals in the relevant technical field, regardless of their length.

Consequently, the patent discloses the claimed process in a manner sufficiently clear and complete for it to be carried out by a skilled person.

4. Main request: novelty (Article 54 EPC)

4.1 General observations concerning claim 3

Claim 3 is a product claim that refers back to claims 1 and 2, which are process claims. In the context of claim 3, these features are to be understood as product-by-process features, which define the product in so far as they have structural consequences that can be seen in the product obtained using the process. In this regard, the opposition division noted the following in section 16.3 of the decision under appeal.

- The process of claim 1 does not imply a particular shape of structure per se but has to result in corroded portions that are distinct from uncorroded

portions, such that identifiable recesses corresponding to the corroded portions are produced. The recesses in the mould have to be less glossy than the surrounding areas so that the moulded product, which is the inverse of the mould, comprises relatively glossy recesses.

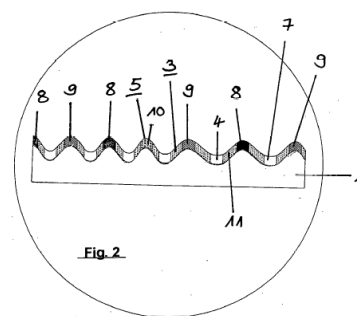
- The process of claim 1 does not imply a mould surface with exactly two different gloss levels. The uncorroded portions are not required to have the same gloss level.
- A recess formed by corrosion may be distinguishable from a recess formed in another manner.

The board endorses these findings.

4.2 Novelty over document D5

Document D5 discloses panels (*Werkstoffplatten*) with a structured surface, particularly a surface 2 with wood-pore-like raised and recessed areas. The embossing of the surface 2 is produced by a press plate or endless belt with a uniform first degree of gloss, which is given different degrees of gloss in selected areas in subsequent processing steps. These degrees of gloss are produced using a metallic coating and/or mechanical and/or chemical post-treatment.

Fig. 2 shows a panel 1, whose surface 2 has a structure 3 comprising valleys 4 and peaks 5. The press plate used to produce this surface was obtained through etching processes. The areas 7 to 11 have different gloss levels (D5, paragraph [0040]).



4.2.1 Claim 1

In section 17.6.3 of the decision under appeal, the opposition division concluded that the subject-matter of claim 1 was new over document D5 since D5 did not disclose features 5 and 6 in combination with the other features of claim 1.

(a) Feature 5

The opposition division considered feature 5 not to be disclosed because document D5 teaches:

(1) providing an initial metallic layer on the structured surface to set the desired initial gloss level (claim 2 and paragraph [0010]), in which case the second protective layer is not applied directly to the uncorroded portions

(2) carrying out a further etching step (*Rundätzung*), whereby the edges created by deep etching are removed (see paragraph [0016]); this means that the second protective layer cannot cover all the uncorroded portions because some of them no longer exist

Regarding argument (1), the board notes that the presence of an initial metallic layer is optional. Claim 1 of document D5 does not contain any such layer. Furthermore, paragraph [0010] forms part of the description of the state of the art. Paragraph [0025] explicitly states that the initial chrome plating of the surface can be omitted in favour of polishing the surface.

Argument (2) is more convincing because "the aforementioned uncorroded portions" are the portions that remain uncorroded after corrosion in features 3 and 4. As explained above, feature 5, as understood by the

board, does not encompass the partial covering of uncorroded portions.

The assertion that the skilled person would have understood that the round-etching step is only required for faithfully imitating wood pores and can be omitted when generating other patterns is unpersuasive because it goes beyond the direct and unambiguous disclosure of document D5. The main focus of this document is reproducing wood pores (see paragraph [0001]). While paragraph [0031] does mention other surface patterns, the question of which steps might be omitted when generating these patterns is not addressed. Thus, feature 5 is not directly and unambiguously disclosed.

(b) Feature 6

The opposition division appears to have decided that feature 6 is not directly and unambiguously disclosed on the ground that a matting treatment is just one of several options mentioned in document D5.

Paragraph [0018] of document D5 states that a wide range of gloss levels can be achieved using a metallic coating or mechanical or chemical post-treatment. Paragraph [0020] mentions polishing and sandblasting; paragraph [0027] mentions sandblasting and etching.

The case law concerning selections from two lists is not applicable here as there are no lists. Essentially, paragraph [0027] of document D5 teaches that the gloss level can be varied by matting (etching or sandblasting) or polishing (mechanical polishing or electropolishing). Thus, feature 6 is disclosed.

(c) Conclusion

The subject-matter of claim 1 differs from the disclosure of document D5 on account of feature 5.

4.2.2 Claim 3

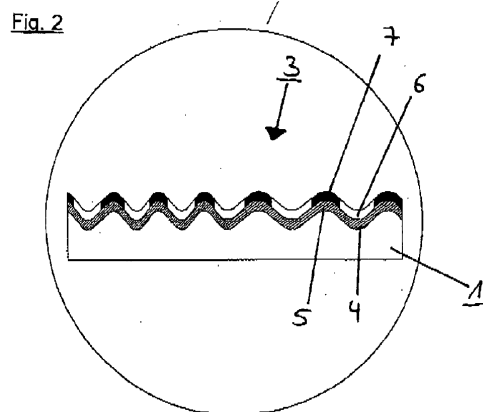
The opposition division derived the novelty of the subject-matter of claim 3 from its finding that the subject-matter of claim 1 was new over the disclosure in document D5 ("correspondingly"). This conclusion has structural consequences. When inspecting the mould of document D5, the skilled person would have realised that a further etching step (*Rundätzung*) occurred after the initial etching (*Tiefenätzung*). Thus, the process used could not have included feature 5.

Therefore, document D5 does not anticipate the subject-matter of claim 3 either.

4.3 Novelty over document D1

Document D1 discloses a method of processing a structured surface of an embossing tool. The surface is first coated with a metallic coating (6) over its entire area, and a further metallic coating (7) is arranged on the first coating in

predetermined areas. The degree of gloss of the first coating differs from that of the second coating.



Note: Although documents D5 and D1 appear similar at first glance, Fig. 2 of D1 depicts a mould (*Pressblech*), whereas Fig. 2 of D5 shows a panel (*Werkstoffplatte*) made using a mould.

(a) Claim 1

As can be seen in section 17.2.2 of the decision under appeal, the opposition division concluded that document D1 did not anticipate the process of claim 1 as feature 5 was not disclosed.

The opposition division explained that, to arrive at the configuration of Fig. 2 in document D1, the second protective layer had to be positioned above the corroded portions 4. As the second protective layer is explicitly applied to the first chrome layer 6, it is not applied directly to the uncorroded portions.

The appellant refers to the first four steps of the process disclosed in paragraph [0017] of document D1, arguing that feature 5 is disclosed because the second mask is reapplied to the chemically treated surface in exact alignment with the first mask. Therefore, it is applied directly to the uncorroded areas that correspond to the first mask.

The term "*passgenau*" expresses the idea of something that fits precisely. Paragraph [0017] discloses that a second, precisely fitting mask is applied to the chemically treated surface using digital printing. However, it is unclear what exactly the mask is fitting. If the expression "chemically treated surface" refers to the parts of the surface that were treated because they were not covered by the first mask, then the second mask would not coincide with the first.

However, if "chemically treated surface" refers to the entire surface after chemical treatment, paragraph [0017] does not provide any information about the "fit". Paragraph [0016] explains that deep etching is usually carried out first to produce the surface structure, followed by round etching to emphasise the shape of the pore structure. It is likely that this is what is referred to in paragraph [0017]. If so, the situation would be very similar to that disclosed in document D5, and the conclusion that feature 5 is not disclosed would be the same.

Furthermore, the board doubts that document D1 discloses feature 6 in its entirety as it does not mention the use of a matting substance. In document D1, the difference in gloss is achieved by applying different chrome coatings.

Therefore, there is no direct and unambiguous disclosure of features 5 and 6 in document D1.

(b) Claim 3

The opposition division argued that since the mould shown in Fig. 2 of document D1 has a chrome layer 6 covering the corroded and uncorroded portions of the mould surface, positioned between the structured surface and chrome layer 7, it could not be produced by the process according to claim 1, which includes feature 5. Therefore, the subject-matter of claim 3 was new over document D1.

According to paragraph [0026], the mould 1 in Fig. 2 has a surface with valleys 4 and peaks 5, which are generated by etching processes. The areas not to be subjected to etching are covered by a mask. After

etching, the structure is finished by further chemical processing, polishing, etc. A first chrome layer 6 with a certain gloss is then applied, after which the surface is partially covered with a second mask. The uncovered areas are then coated with a chrome layer 7 with a different degree of gloss.

Claim 3 only applies to the mould depicted in Fig. 2 and described in paragraph [0026] of document D1 if a process with features 5 and 6 creates structural features absent from this mould. In the board's view, this is the case here. In particular, whether a matting substance was used is detectable on the surface.

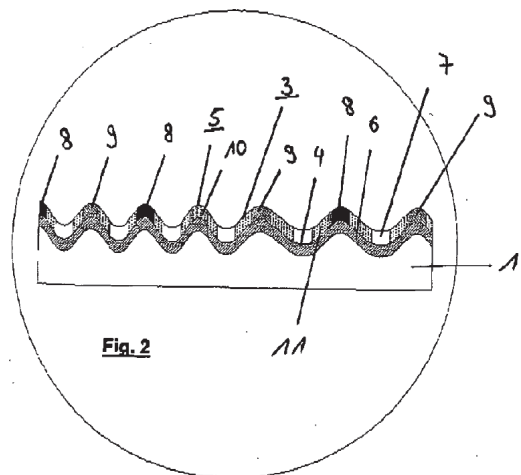
The appellant's hypothetical example of a chrome layer filling the valleys and being etched to create recesses is irrelevant because no such mould is disclosed in document D1.

(c) Conclusion

The subject-matter of claims 1 and 3 is new over the disclosure of document D1.

4.4 Novelty over document D2

Document D2 discloses a method of processing the structured surface of an embossing tool and the resulting tool. The surface is first coated with a metallic coating over its entire area, and then a further metallic coating with a different degree of



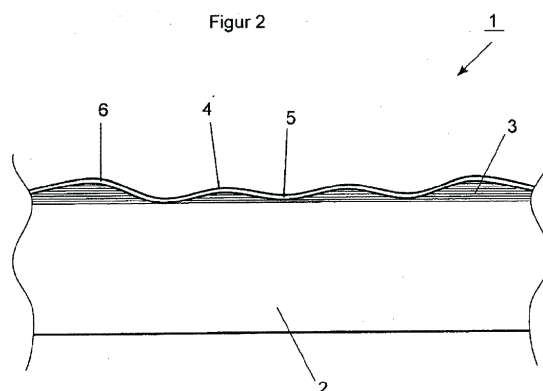
gloss is applied to selected areas. These different degrees of gloss are produced by combining metallic coatings with mechanical or chemical post-treatments.

The appellant's arguments are analogous to that regarding novelty over document D1. Therefore, the board refers to its conclusions regarding claims 1 and 3 in point 4.3 above.

4.5 Novelty over document D3

Document D3 also discloses a method for processing the structured surface of an embossing tool. Fig. 2 shows a mould comprising a carrier on which metal layers are arranged on top of each other. This layer structure is formed by applying a mask to certain areas of the carrier and then coating it with metal. The depth profile can be adjusted by varying the number of metal layers; there are raised areas 5 and deeper areas 6.

Lastly, a chrome layer with a different degree of gloss can be applied to the raised areas 5, while the deeper areas 6 are covered with a chrome layer (see paragraph [0034]).



In section 17.4.2 of the decision under appeal, the opposition division examined the novelty of the subject-matter of claims 1 and 3. It concluded that document D3 did not disclose applying a corrosive substance to areas not covered by a first protective layer, as required by features 3 and 4. While paragraph [0021] mentions the possible use of a corrosive substance to smooth the contours of the protruding

structure, this is not disclosed in connection with a protective layer. According to paragraphs [0022], [0023] and [0034], matting substances or metal layers can be applied to portions of the surface; however, there is no disclosure of this in connection with a protective layer. Therefore, the opposition division concluded that document D3 did not disclose features 3 to 8 and that the mould disclosed in document D3 could not be produced by a process according to claim 1.

The most significant difference between the methods used in the patent and those in document D3 is that the former uses corrosive substances to create the surface pattern, whereas the latter teaches dispensing with etching and structuring the surface by selectively applying metal layers. In the board's view, this results in a structural difference that can be detected by inspecting the mould.

The appellant argued that even if a layer structure could be recognised in a cross-section of the pressed sheet metal from document D3, this would not lead to a structural difference as the manufacturing process according to the patent could also use a plate as the initial material, with individual metal layers applied on top of each other and then removed in areas during the process. In the board's view, it is possible to determine whether the final surface structure was achieved by etching or by applying layers of metal.

Therefore, the subject-matter of claim 3 is new over document D3.

4.6 Novelty over document D4

Document D4 discloses a method for adjusting the degree of gloss of a structured surface of a press plate or press belt, with part of the surface being treated with a laser beam, to a depth of 1 to 5 μm .

The opposition division examined the novelty of the subject-matter of claims 1 and 3 in section 17.5.3 of the decision under appeal. It acknowledged that document D4 disclosed features 1 to 4 and 7 but found that none of the alleged passages disclosed features 5 and 6. Paragraph [0004] did not teach that a second corroding step would lead to a different gloss level, nor did it teach providing a second protective layer on the uncorroded portions. Paragraph [0005] related to the possibility of applying a chrome coating to the entire surface of the mould. Paragraph [0008] referred to the priority document of document D1 and did not disclose feature 5 for the same reasons as document D1. In document D4, the variation in gloss was obtained by laser treatment. The opposition division assumed that the skilled person would have been able to detect (e.g. by microscopic analysis) that the matt/glossy structure was created not by means of a matting substance but by means of partial melting due to laser treatment.

The appellant argues that the pressing tool manufactured according to document D4 has peaks and valleys (see paragraph [0004]) and that the peaks may have a higher degree of gloss than the valleys (see paragraph [0022]). However, this argument cannot overcome the objection raised by the opposition division.

Therefore, the subject-matter of claim 3 is new over the disclosure of document D4.

4.7 Conclusion on novelty

The subject-matter of claims 1 and 3 is new over the disclosure of documents D1 to D5.

5. Main request: inventive step, starting from document D5 (Article 56 EPC)

5.1 As stated in point 4.2 above, the subject-matter of claim 1 differs from the disclosure of document D5 on account of feature 5. In the process disclosed in document D5, the presence of the round-etching step means that the second protective layer is not applied directly to the uncorroded portions of the mould surface.

The respondent considered the objective technical problem solved by feature 5 to be reducing the complexity and cost of producing a metal mould with a structured surface featuring glossy, uncorroded areas and matt, corroded areas.

The decisive question for the board is whether document D5 provides an incentive for the skilled person seeking to solve this problem to omit the round-etching step.

In this context, the disclosures in paragraphs [0016] and [0031] of document D5 are relevant.

- Paragraph [0016] discloses that, to create the surface structure, deep etching is typically performed first, followed by round etching to accentuate the pore structure's shape. This pore structure is that of the wood pores mentioned in paragraphs [0001], [0002] and [0014] of document D5 (see also paragraphs [0029] to [0031] and [0040]).

In document D5, the term "pore" never explicitly refers to structures other than wood.

- The final sentence of paragraph [0031] states that both the frequency of mask application and the processing steps essentially depend on the surface structure sought. For example, this could be a true-to-life reproduction of a wood pore or stone surface, or graphic artificial structures could be reproduced in detail.

The argument that paragraph [0031] only refers to the frequency of processing steps and that therefore the skilled person would not have considered omitting one of the two fundamental etching steps (deep and round etching) is unpersuasive because both steps involve etching. In the context of paragraph [0031], the omission of the round-etching step should be analysed not as the omission of a fundamental step but rather as a reduction in the number (frequency) of etching steps from twice to once.

When considering the teaching of paragraph [0031], the skilled person would have understood that, if the structure to be reproduced does not require round etching, it can be omitted. As the round-etching step is presented in the context of imitating wood pores, a skilled person wishing to create a different surface structure would have considered omitting the round-etching step and applying the second protective layer directly to the uncorroded portions of the mould surface.

The fact that the second protective layer covers the uncorroded portions entirely rather than partially is a

design choice and cannot, in itself, constitute an inventive step.

In summary, all the differences (i.e. the absence of round etching and the fact that the uncorroded surfaces are polished and fully covered by the second protective layer) are conventional measures with a recognised effect on the surface structure of the mould. Depending on the chosen design, the skilled person would have selected these measures to obtain the desired structure, if necessary.

Thus, the skilled person starting from document D5 and seeking to solve the aforementioned objective technical problem would have obtained a process and a mould according to claims 1 and 3 without any inventive effort.

5.2 Conclusion on inventive step

Starting from document D5, the subject-matter of claims 1 and 3 lacks an inventive step.

Consequently, it is not possible to maintain the patent as amended on the basis of the main request. Given this conclusion, it is unnecessary for the board to rule on the inventive-step objection based on document D1. Therefore, the decision under appeal must be set aside.

6. Auxiliary request 1

Claim 1 of the first auxiliary request is identical to claim 1 of the main request, which was found not to be allowable. Therefore, it is not possible to maintain the patent as amended on the basis of this request. The request has to be dismissed.

7. Remittal to the opposition division

The respondent requested that the case be remitted to the opposition division for further prosecution. The appellant stated that it did not object to this course of action. Given that the opposition division did not rule on the auxiliary requests and the board clarified the interpretation of several claim features, it is appropriate to grant the respondent's request and remit the case to the opposition division for further prosecution in accordance with Article 111(1) EPC and Article 11 RPBA.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution.

The Registrar:

The Chairman:



N. Schneider

P. Lanz

Decision electronically authenticated