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**Datasheet for the decision
of 11 July 2024**

Case Number: T 0738/20 - 3.4.03

Application Number: 14702938.3

Publication Number: 2951029

IPC: B42D25/00, B42D25/29,
B42D25/324, B42D25/328

Language of the proceedings: EN

Title of invention:

SECURITY DEVICES AND METHODS OF MANUFACTURE THEREOF

Patent Proprietor:

De La Rue International Limited

Opponents:

CCL Secure Pty Ltd
Leonhard Kurz Stiftung & Co. KG

Headword:

Relevant legal provisions:

EPC Art. 52(1), 54(1), 54(2), 100(a), 111(1), 112a(2)(c)
EPC R. 100(2), 106
RPBA 2020 Art. 11, 12(4), 12(6), 12(8), 13(1), 13(2), 15(4),
15(6)

Keyword:

Novelty - main request (no)
Late-filed request - justification for late filing (yes) -
admitted (yes)
Late-filed evidence - justification for late filing (yes) -
admitted (yes)
Stay of proceedings in view of a pending referral to the
Enlarged Board of Appeal (no)
Obligation to raise objections - objection raised (yes) -
objection dismissed
Remittal to the department of first instance

Decisions cited:

T 0439/22

Catchword:

1. Parties are free to formulate requests conditional on the board's findings on questions to be decided. The condition may also relate to the board's underlying reasons. (Reasons 4.4)
2. A party cannot, through such conditional requests, oblige the board to provide its full reasons for its decision before the final decision is issued. (Reasons 4.6)
3. Conditional requests that are conditional on the board's reasons can also contribute to procedural efficiency and can help the board to reach a decision without having to discuss issues that may turn out not to be decisive for the final outcome of the appeal. However, such requests do not bind a board in the sense that a party can oblige the board to conduct the proceedings only in a particular order or only restricted to particular issues as a party wishes, thereby possibly avoiding undesirable outcomes for that party. In proceedings involving several parties other parties are also free to argue why the board should not allow such a conditional request. In principle, the board is free to conduct the proceedings in any appropriate order and to discuss any issue, as long as the relevant substantive and procedural requests of the parties are properly considered and decided. (Reasons 4.7 and 4.8)



Beschwerdekammern

Boards of Appeal

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Case Number: T 0738/20 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 11 July 2024

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 27 February
2020 rejecting the opposition filed against
European patent No. 2951029 pursuant to Article
101(2) EPC.**

Composition of the Board:

Chairman T. Häusser
Members: A. Böhm-Pélissier
 T. Bokor

Summary of Facts and Submissions

- I. The appeal of opponent 2 is against the decision of the opposition division rejecting the oppositions against European patent EP 2 951 029 B1. The division held *inter alia* that the subject-matter of claim 1 of the patent as granted was new and involved an inventive step in view of D1 and the other documents cited by the opponents.
- II. The patent had been opposed in its entirety on the grounds of lack of novelty (Article 100(a) EPC in combination with Articles 52(1), 54(1) and (2) EPC), lack of inventive step (Article 100(a) EPC in combination with Articles 52(1) and 56 EPC) and extension of subject-matter beyond the content of the application as filed (Article 100(c) EPC).
- III. Reference is made to the following **documents**:

D1 = US 2012/0156446 A1,
E1 = WO 2011/006634 A2,
E7 = WO 03/091042 A2,
E8 = JP 2009-137081 A.

The following weblinks were mentioned by the board in its two communications according to Article 15(1) RPBA in order to provide evidence for the skilled person's common general knowledge regarding the transparency of quoted substances:

B1 = Wikipedia article "**Transparency and translucency**", publication date unknown, (<https://>

en.wikipedia.org/wiki/
Transparency_and_translucency)

- B2 = Website extract "**What is visible light transmission (VLT)**", publication date unknown, from "Safetyware Group", (<https://safetyware.com/what-is-visible-light-transmission-vlt-2/>)
- B4 = Website extract "**Polyarylate**", publication date unknown, from "AZOMaterials", (<https://www.azom.com/article.aspx?ArticleID=856>)
- B5 = Website extract "**Udel® PSU**", publication date unknown, from "Syensqo", (<https://www.syensqo.com/en/brands/udel-psu>)
- B6 = Website extract "**Polyethersulfone (PES)**", publication date unknown, from "Omnexus", (<https://omnexus.specialchem.com/selection-guide/polyethersulfone-pes-thermoplastic>)
- B7 = Website extract "**Polyetherimide**", publication date unknown, from "Emco Industrial Plastics", (<https://www.emcoplastics.com/polyetherimide-unfilled/>)
- B8 = Website extract "**Cyclic Olefin Copolymer (COC)**", publication date unknown, from "Entec Polymers", (<https://www.entecpolymers.com/products/resin-types/cyclic-olefin-copolymer-coc>)
- B9 = Wikipedia article "**Polycarbonate**", publication date unknown, (<https://en.Wikipedia.org/wiki/Polycarbonate>)
- B10 = Wikipedia article "**Acrylate polymer**", publication date unknown, (https://en.wikipedia.org/wiki/Acrylate_polymer)

The following documents were introduced by the respondent (patent proprietor) in reply to the communication(s) under Article 15(1) RPBA:

- R1 = Extract from "**Thermoplastic Materials: Properties, Manufacturing Methods, and Applications**", by C.C. Ibeh, published by Taylor & Francis Group (2011), pages xix to xxi ("Preface") and 539 to 550 ("Chapter 24: PEEK")
- R2 = Extract from "**Testing and Evaluation of Plastics**", by A.B. Mathur et al., published by Allied Publishers PVT. Limited (2003), page 373
- R3 = Extract from "**Plastics Engineering**" (Fourth Edition), by R.J. Crawford et al., published by Butterworth-Heinemann (2020), pages 48 to 49
- R4 = Extract from "**An Introduction to Materials Engineering and Science for Chemical and Materials Engineers**", by B.S. Mitchell, published by Wiley-Interscience (2004), pages 900 to 902
- R5 = Extract from "**Printing Ink Manual**", edited by F.A. Askew, published by W. Heffer & Sons Ltd. (1969), pages 295 to 297

IV. The board's first communication under Article 15(1) RPBA was issued on 6 February 2024. The board set out, *inter alia*, that claim 1 of the main request did not appear to be novel over E1/D1 or E7, and also appeared to lack inventive step over E8. The board also set out its interpretation of the feature "transparent" and cited several sources as evidence of the skilled person's understanding of this term, as well as sources on the material properties of the layer materials disclosed in the cited prior art (the documents B1, B2 and B4 to B10 mentioned above under point III.).

V. With letter of 29 April 2024, the respondent requested a postponement of the scheduled oral proceedings and that the board re-issues its communication under Rule 100(2) EPC, in order for the respondent to benefit

from the more favourable conditions of Article 13(1) RPBA instead of the more stringent conditions for amendment under Article 13(2) RPBA. They also requested remittal to the opposition division for further prosecution. The respondent argued that the board lacked powers to introduce new evidence, in an analogous application of the RPBA that effectively did not permit parties to amend their case. In the present case, the previous inventive step attack based on E8 had been suddenly presented as a novelty attack. In particular, the board's proposed new and significantly broader interpretation of the feature "transparent" put the respondent in an inequitable position, and the new requests were justified in view of the inequitable procedural situation of the respondent.

- VI. The board issued a second communication dated 3 May 2024, stating that the board was acting within its powers in respect of the new claim interpretation and the new documents. There were no good reason to postpone the oral proceedings, nor to re-issue the board's communication under Rule 100(2) EPC. The parties had sufficient time to respond. The RPBA did not oblige the board to issue a communication under Rule 100(2) EPC instead of issuing it under Article 15(1) RPBA, and the board did not see any procedural benefit for the proprietor or any loss of rights resulting from the board's choice.
- VII. The respondent repeated its requests and arguments in a further submission dated 6 June 2024. New documents R1 to R5 and new auxiliary requests 1 to 5 (preceding the earlier auxiliary requests) and 12 were filed. The respondent argued in detail that the board's new claim interpretation and the introduction of the new documents created a fundamentally new framework of the

appeal and therefore justified the amendments to the respondent's appeal case and also justified the request for remittal. The respondent also formulated a conditional objection under Rule 106 EPC, arguing that the board's conduct of the proceedings, in particular the board's insistence on the introduction of the new interpretation, allegations, facts and evidence, would violate the respondent's right to be heard within the meaning of Article 113 EPC, if the board did not admit the amendments or remit the case to the opposition division.

VIII. The oral proceedings were held as originally summoned on 11 July 2024. The board's decision was announced at the end of the oral proceedings.

IX. **Requests**

- (a) The appellant (**opponent 2**) requested that the decision under appeal be set aside and the patent be revoked in its entirety. Furthermore, it requested to reject any conditional request and that the new auxiliary requests 1 to 5 and 12 not be admitted by the board to the appeal proceedings.
- (b) **Opponent 1** is party as of right (Article 107 EPC) and did not submit any requests or arguments during the appeal proceedings.
- (c) The respondent (**patent proprietor**) requests that
 - (i) as main request, if the board remains minded to introduce the new claim interpretation, assertions and evidence introduced in the board's communication under Article 15(1) RPBA, the decision under appeal be set aside and the case be

- remitted to the opposition division for further prosecution under the new framework, before any decision on the granted claims is taken, including on the interpretation of those claims;
- (ii) if the main request is not allowed, the appeal be dismissed and the patent be maintained as granted;
 - (iii) as a conditional request, if the board remains minded to disregard the definition of "transparent" in paragraph [0010] of the patent in the interpretation of the claims, the case be stayed in view of the recent referral to the Enlarged Board of Appeal pending as G 1/24 (cf. T 0439/22);
 - (iv) in the event the board does not dismiss the appeal and does not maintain the patent as granted, the case be remitted to the opposition division for examination of the auxiliary requests;
 - (v) if that request is refused, the patent be maintained in amended form in accordance with one of auxiliary requests 1 to 12 filed on 6 June 2024;
 - (vi) as additional procedural requests, documents B2 and B4 to B10 be removed from proceedings, documents R1 to R5 be admitted to the proceedings, and new auxiliary requests 1 to 5 and 12 be admitted to the proceedings.
 - (vii) The objection under Rule 106 EPC as formulated in the submissions dated 6 June 2024 was upheld.

X. **Claim 1** of the patent as granted (labelling "(A)", "(B)", ... by the opposition division):

(A) Security device (20)
(B) comprising a first transparent layer (21) having an optically variable effect generating relief structure (22) formed in a surface thereof;
(C) a reflection enhancing layer (23) extending over the relief structure (22) both surfaces of the reflection enhancing layer (23) following the contour of the relief structure (22) such that the optically variable effect is exhibited on both sides;
(D1) and a second transparent layer (24) extending over the reflection enhancing layer,
(D2) the lateral extent of the second transparent layer (24) being less than the whole area of the security device (20) and corresponding to the lateral extent of the reflection enhancing layer (23),
(E) wherein the first (21) and/or second transparent layer (24) comprises one or more optically effective substances such that the appearance of the optically variable effect generated by the relief structure (22) is different when viewed through the first transparent layer (21) compared with when viewed through the second transparent layer (24), at least under illumination at a wavelength at which at least one of the optically effective substance(s) is visible;
(D3) and wherein the lateral extent of the reflection enhancing layer (23) and second transparent layer (24) does not match that of the relief structure (22).

XI. Claim 1 of (new) **auxiliary request 1** differs from claim 1 as granted in that the following feature (F) (labelling "(F)" by the board) is added at the end of the claim:

(F) wherein the reflection enhancing layer (23) and second transparent layer (24) extend beyond the

periphery of the relief structure (22) in all directions by at least 100 microns

XII. In view of the board's decision, it is not necessary to list any claims of **auxiliary requests 2 to 12**.

XIII. **The arguments of the appellant** as far as they are relevant for the decision can be summarised as follows:

- (a) D1 implicitly disclosed a first transparent layer (i.e. compensating layer 10; Figures 8a, 8b) because it made no sense to adjust refractive indices (see D1, [0056]) to eliminate an optical effect unless both layers were transparent;
- (b) D1 disclosed a thin homogeneous metal layer (5) ([0058]) which generated in view of the disclosure of Fig. 8a the same optical effect on both sides of the metal layer;
- (c) D1 disclosed that the appearance of said optical effect when viewed through the first transparent layer (10) was different from that when viewed through the second transparent layer (31) solely due to the coloured coating layer 31 (Fig. 8a);
- (d) therefore, D1 disclosed all the technical features of claim 1 of the patent as granted;
- (e) documents B1, B2, and B4 to B10 were correctly introduced into the proceedings according to Article 114(1) EPC; since none of the documents B2 and B4 to B10 was discussed during the oral proceedings with regard to the novelty of claim 1 as granted, a remittal back to the first instance was not justified;
- (f) new auxiliary requests 1 to 5 and 12 should not be admitted because no new facts and evidence had been discussed at the hearing which had not yet been discussed before the opposition division; in the

event that they were allowed, it was agreed to remit the case to the opposition division if clear instructions were given as to how to proceed;

- (g) in the event that the definition of transparency in paragraph [0010] of the contested patent is disregarded, it was agreed to stay the proceedings in view of referral G1/24, question 3.

XIV. **The arguments of the respondent** as far as they are relevant for the decision can be summarised as follows:

- (a) There was no explicit disclosure in D1 that the compensating layer 10 was transparent;
- (b) at a layer thickness of about 1000 nm, valleys in the relief structure of metal layer 5 were filled during vapour deposition, resulting in a different optical effect on the "lower" surface of the metal layer 5 with regard to the "upper" surface;
- (c) since the layer 10 was not transparent, the same optical effect could not be visible when viewed through the layer 10 as when viewed through the layer 4;
- (d) documents B2 and B4 to B10 were not to be taken into account as they constituted a new, fresh case;
- (e) objections under Rule 106 EPC were maintained, given that the new evidence (B2 and B3 to B10) introduced by the board was still on file;
- (f) the new auxiliary requests were to be admitted and the case remitted to the opposition division, due to the introduction of the new facts and evidence (i.e. new documents B2 and B4 to B10) by the board, which remained on the file.

Reasons for the Decision

1. The appeal is admissible.

2. The invention

The security of a security device is to be improved. This is achieved by a transparent (coloured) layer and the resulting different (colour) impression when the document is viewed from the top and bottom and by the fact that a reflection enhancing layer does not match the lateral extent of a relief structure in a supporting transparent layer.

3. Main request and request for dismissal of the appeal

3.1 Document D1

3.1.1 D1 discloses in Figs. 8a and 8b a security device similar to the present invention:

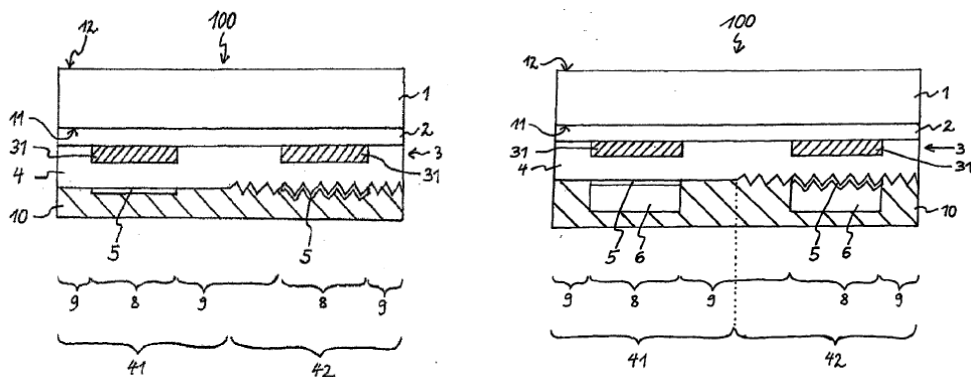


FIG. 8a

FIG. 8b

D1

- 1 carrier layer
- 2 functional layer
- 3 decorative layer
- 4 replicating layer with relief structure (hologram)
- 5 metal layer (diffractive)
- 6 resist layer (coloured)
- 10 compensating layer

Figs. 8a and 8b relate to the same embodiment, except that in the variant of Fig. 8b the resist layer 6 is not removed.

3.1.2 The idea of D1 is that a decorative ply 31, which may be both transparent and coloured ([0061]), is used as transparent mask for structuring metal layer 5 and resist layer 6.

3.2 **Definition of "transparent"**

The appellant opponent argued for lack of novelty based on two distinct embodiments of D1, Figs. 8a and 8b. The board's decision is based on the appellant's line of reasoning with respect to Figure 8a. There the second transparent layer is layer 31 (and not layer 6, as in the embodiment of Fig. 8b), and the first transparent layer is compensating layer 10. The transparency of compensating layer 10 had been a contentious issue between the parties, the proprietor arguing that D1 did not clearly and unambiguously disclose that compensating layer 10 was transparent. The parties also disagreed on the proper definition of the feature "transparent". In this respect, the definition of transparency is only relevant for deciding whether compensating layer 10 is transparent, which is derived from the matching of the refractive indices and the optical effect that should not be visible. This assessment is consistent with the definition given in paragraph [0010] of the patent in suit (highlighting added by the board):

[0010] *The term "transparent" means that the material in question is substantially clear, with low optical scattering - i.e. items on one side of the material can be seen through it, from the other*

- but not necessarily colourless. For instance, a transparent material may carry a coloured tint.

3.3 **Novelty over D1 - appellant's arguments**

Feature (B)

3.3.1 The security device was to be viewed from both sides (D1:[0036] "*Accordingly, different color impressions are produced when the multilayer element is viewed from different sides*"). The compensating layer was designed as a single layer and possibly as a decorative layer ([0047]), which was disclosed to be at least partly transparent ([0049]). D1 described that the refractive index in layers 4 and 10 had to be very similar (difference of refractive indices $\Delta n < 0.3$, [0056]), so that the "*optical effect formed by the relief*" was "*no longer perceptible in the regions in which the compensating layer is applied directly to the replicating layer*" ([0056]), i.e. at the interface between layers 4 and 10, where no metal layer is applied. Conversely, this meant that the optical effect could be perceived if the refractive indices had a greater difference. This also meant that the optical effect had to be perceptible from both sides, i.e. viewed from above and below. Consequently, layers 4 and 10 had to be similarly transparent.

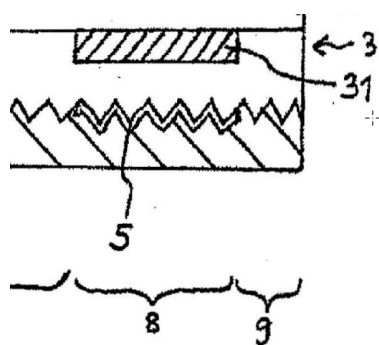
3.3.2 It was undisputed that replicating layer 4 was transparent. In view of the fact that light entering via replicating layer 4 and reflected by the reflection layer 5 produced an optical effect (see [0058]), it was unmistakably clear that the optical effect had to be visible through layer 4 and that this layer was transparent, especially since the exposure and lithographic structuring of layers 5 and 6 also took

place through layer 4. The compensating layer 10 had to be as transparent as replicating layer 4, otherwise it would make no sense to adjust the refractive indices. D1 gave no indication that the refractive index of each layer was composed of the refractive indices of several layers or of scattering centres.

Feature (C)

- 3.3.3 Paragraphs [0058] and [0098] of D1 disclosed that the metal layer 5 was produced by vapour deposition with a thickness *"from 20 to 1000 nm, more particularly 20 to 100 nm"*. This layer was a *"reflection layer for light incident from the side of the replicating layer"* ([0058]) and by means of the metal layer 5 it was *"possible to generate a multiplicity of different optical effects which can be used actively for security aspects"* ([0058]).

Consequently, a thin layer of similar thickness was applied in the same way as in the contested patent (see impugned patent, paragraph [0029]: thickness of 5 to 100 nm; paragraph [0041]: vapour deposition). The metal layer therefore had the same properties as the layer defined in granted claim 1. Fig. 8a also had to be used to evaluate the disclosure of D1, in particular the very thin line representing the metal layer which showed that the metal layer had a constant thickness and that the thickness was about an order of magnitude smaller than the structure size of the relief structure.



Detail from Fig. 8a

Feature (E)

3.3.4 Since layers 1 and 2 were removed and layers 4 and 10 were transparent, the relief of metal layer 5 exhibited the same optical effect on both sides, except that the appearance was different on the upper side because transparent decorative layer 31 changed the optical impression on the upper side.

3.4 **Novelty over D1 - respondent's arguments**

Feature (B)

3.4.1 Transparency of the compensating layer 10 was not mentioned in D1. The hints as to its optical properties given in paragraphs [0056] and [0090] did not imply its transparency since the compensating layer 10 might be coloured by an opaque colourant ([0049]). Consequently, the compensating layer 10 could be translucent or opaque, i.e. not transparent as defined in the patent in suit (paragraph [0010]) and in B1. The refractive indices mentioned in paragraphs [0056] and [0090] could be an average of several refractive indices of a translucent layer, where the scattering centres had a different refractive index than the carrier material. The expression "different sides" in [0036] could refer to different angle/directions on one and the same side of the security element.

Feature (C)

- 3.4.2 Even though the reflection layer (5) was a metal layer finely applied by vapour deposition on the relief structure and even if also the external surface may follow somehow the contour of the relief as shown in the figures, it was nowhere mentioned or hinted at in D1 that the reflection layer had a constant thickness. Accordingly, it could not be excluded that the surface of the metal layer which was opposite to the replicating layer was so differently outlined with respect to its other side as to be unable to reproduce the same optically variable effect generated by the relief structure. Especially the term "*having a thickness in the range from 20 to 1000 nm*" (D1, paragraph [58]) could be interpreted to imply that the reflective layer 5 had a variable thickness within said range. This opinion was further supported by the fact that the multilayer element of D1 was mainly intended to be used as a transfer film to be applied to a support at the side opposite to the carrier film (1), which meant that the optical effect of the relief was to be observed only from the carrier film side (D1, paragraphs [0030], [0047] and [0087]).
- 3.4.3 With a layer thickness of 1000 nm - as was indicated in paragraph [0058] as the upper limit - it would be unavoidable that valleys would be filled more than peaks, whereby the optical effect on one side would be lost. On the other hand, the selection of the range from 20 to 100 nm, which was also mentioned in paragraph [0058], would constitute a selection invention and would therefore be a matter of a discussion on inventive step.

Feature (E)

3.4.4 Since compensating layer 10 could be translucent or opaque (see above), i.e. not transparent in the sense of the definition in the patent in suit (paragraph [0010]), the above-mentioned same optical effect could not be produced by the metal layer 5 and perceived on both sides of the security device having a different appearance.

3.5 **Novelty over D1 - conclusions of the board**

The board came to the conclusion that the subject-matter of claim 1 as granted is not new over document D1:

Feature (B)

3.5.1 The board interprets "sides" in the expression "different sides" in paragraph [0036] of D1 as the top and bottom of the security element. If different directions or angles of one and the same side were meant, then the term "directions" or "angles" would have been used. Consequently, the intention in D1 is that the security element is viewed from the top and bottom.

3.5.2 The respondent argued that even with opaque or translucent material of layer 10, the perception of the layer boundaries would disappear. However, although D1 mentions in section [0090] that the layers are then no longer perceptible as separate layers, section [0056] clearly refers to the optical effect of the *relief structure* on layer 4. However, such an optical effect is not achieved by (at least partial) reflection like

the optical effect of the metal layer 5 ([0058]), but is achieved on transmission and reflection because of the non-alignment of the refractive indices. The matching of the refractive indices would therefore make no sense if both layers were not similarly or equally transparent.

3.5.3 D1 mentions that compensating layer 10 may be a decorative layer, wherein a decorative layer has either opaque or transparent colour centres [0049]. Even if the refractive index of compensating layer 10 were composed of different refractive indices, in the second case mentioned above the compensating layer 10 is disclosed to be transparent, which is consistent with the disclosure in [0056] that the optical effect disappears implying that both layers 4 and 10 are transparent.

3.5.4 As the respondent itself has submitted, the reflection at the layer interface is very low with similar refractive indices of the interfacing layers. The disclosure in section [0056] therefore only makes physical sense if the observation takes place with transparent layers from both sides. This is because if the compensating layer 10 were not transparent, i.e. translucent or opaque, then there would be no motivation to align the refractive indices, as the layer boundaries would not be visible anyway, let alone the optical effect.

3.5.5 The board therefore concludes that it would be immediately apparent to the skilled person that the compensating layer 10 must be transparent (Case law of the Boards of Appeal of the EPO [CLBA], 10th edition 2022, I.C.4.3).

Feature (C)

- 3.5.6 Vapour deposition is a standard process that aims to produce uniform layer thicknesses. Consequently, the skilled person would understand nothing else from the disclosure of D1 than that a thin metal layer of uniform thickness is applied. Varying the layer thickness is generally only possible with additional effort (additional masks etc.). A different layer thickness would also impair the intended optical effect ([0058]). If a variation of the layer thickness in this area had been intended, the purpose, the technical means required and the intended effects would have been specified in D1.
- 3.5.7 In the given context, the skilled person clearly understands that the predetermined range of the thickness of the deposited metal layer can only be in a range in which the optical effect of the relief ([0058]) is not impaired, i.e. approximately in the preferred range of 20 to 100 nm ([0058]). The preferred range of 20 to 100 nm of D1 corresponds to about one twentieth to about one quarter of the wavelength of visible light. In this range, the optical effect cannot be significantly distorted or "washed out". The "*multiplicity of different optical effects*" ([0058]) are only achieved if there is interference, as the respondent itself argued. However, interference can only take place (on both sides) if the optical relief is reproduced by the metal layer on both sides.
- 3.5.8 Figure 8a, although only a schematic drawing, can also be relied upon to determine the full disclosure of D1. Fig. 8a shows a very thin line indicating the metal layer 5, which lies in the preferred indicated range and is an order of magnitude smaller than the order of

magnitude of the relief structure, so that the relief structure is reproduced on both sides unaffected. The skilled person understands immediately and clearly from this schematic drawing that the "*multiplicity of different optical effects*" mentioned in connection with the metal layer 5 must be produced on both sides of the metal layer. Similarly, the skilled person would see that the optical effect must be the same on both sides due to the very small thickness of the layer compared to the relief structures and that a possible layer thickness of 1000 nm is out of the question for the purposes of the embodiment of Fig. 8a. Rather, the skilled person would realise that a value in the preferred range of 20 to 100 nm had to be used.

3.5.9 The fact that the film is used as a transfer film is not a reason to vary the thickness of metal layer 5 or to use a thick metal layer of 1000 nm, either. In particular, if the film is used as a transfer film and is attached to the desired object on the side of the compensating layer 10 with an adhesive layer so that it can only be viewed from the side of the replicating layer, a thin metal layer is sufficient to achieve the optical reflection effect mentioned in [0058]. However, before the film is attached to the object, it can be viewed from both sides as described in paragraph [0036].

3.5.10 Consequently, if the layer thickness is constant, the same optical effect is exhibited on both sides. For a metal layer that is in the range of one twentieth to one fourth of the wavelength of visible light (preferred range in [0058]) and in view of the disclosure of [0058] and Fig. 8a the same optical effect intended by the optical relief must be created on both sides.

3.5.11 Consequently, the board concludes that the skilled person unambiguously understands that the structure of the metal layer 5 (reflection enhancing layer) is the same on both sides and therefore exhibits essentially the same optical effect.

Feature (E)

3.5.12 As discussed above, layers 4, 10 and 31 of Figure 8a are all transparent and the metal layer 5 produces essentially the same optical effect for light incident from the side of the replicating layer 4 and from the side of the compensating layer 10. However, layer 31 is coloured (see paragraph [0089]), is patterned and extends over a restricted area. Therefore, the appearance of the optical effect viewed through the coating layer 31, being coloured, is different from the appearance when viewed through the compensating layer 10 (not coloured, not patterned).

Assessment of the disclosure of D1 with respect to the claim wording

3.5.13 Therefore D1 discloses (wording of granted claim 1, references relate to D1):

- (A) security device ([0002])
- (B) comprising a first transparent layer (compensating layer 10, [0056], [0058], see above) having an optically variable effect generating relief structure (relief structure in the second zone 42) formed in a surface thereof;
- (C) a reflection enhancing layer (metal layer 5, [0056], [0058], [0098]) extending over the relief structure, both surfaces of the reflection enhancing layer following the contour of the relief structure

(Fig. 8a) such that the optically variable effect is exhibited on both sides (as indicated above, the vapour deposited metal layer implies that the layer follows the contour of the relief structure such that the optically variable effect is exhibited on both sides; paragraph [0058], Fig. 8a);

(D1) and a second transparent layer (coloured coating layer 31) extending over the reflection enhancing layer 5 (Fig. 8a),

(D2) the lateral extent of the second transparent layer (31) being less than the whole area of the security device (Fig. 8a) and corresponding to the lateral extent (region 8 within second zone 42) of the reflection enhancing layer (5),

(E) wherein the second transparent layer (coating layer 31) comprises one or more optically effective substances (paragraphs [0049], [0061], [0089]) such that the appearance of the optically variable effect generated by the relief structure is different ("non-coloured") when viewed through the first transparent layer (compensating layer 10) compared with when viewed ("coloured") through the second transparent layer (coating layer 31), at least under illumination at a wavelength at which at least one of the optically effective substance(s) is visible (380 nm to 750 nm, [0049]);

(D3) and wherein the lateral extent (region 8) of the reflection enhancing layer (metal layer 5) and second transparent layer (coating layer 31) does not match that of the relief structure (second zone 42, Fig. 8a).

3.5.14 Consequently, the subject-matter of claim 1 as granted is not new over document D1 (Articles 100(a), 52(1), 54(1) and (2) EPC).

3.6 Conclusions on the main request and the request for dismissal of the appeal

3.6.1 The board notes that only the appellant's arguments already made before the opposition division led to the conclusion of lack of novelty over D1 and that no new interpretation of the claims or of D1 took place. The interpretation of the claim wording of claim 1 remains within the definition of transparency given in section [0010] of the description of the impugned patent. This was corroborated by document B1, whose admission into the proceedings was not objected to by the respondent. Documents B2 and B4 to B10 did not need to be used to reach the above conclusion.

3.6.2 In view of the above, the respondent's main request and the respondent's request that the appeal be dismissed are rejected.

4. Stay of proceedings with regard to referral G 1/24,

4.1 The board concluded that the proceedings are not to be stayed in view of the referral G 1/24:

4.2 The respondent requested to stay the proceedings in case the definition of paragraph [0010] of the description was disregarded, because in this case question 3 of referral G1/24 had to be answered first:

3. May a definition or similar information on a term used in the claims which is explicitly given in the description be disregarded when interpreting the claims to assess patentability and, if so, under what conditions?

- 4.3 The appellant objected to conditional requests, arguing that conditional requests are inadmissible.
- 4.4 The board is not aware of any provision in the EPC prohibiting conditional requests. In fact, auxiliary requests are also conditional requests. It is also not uncommon for parties to make their requests conditional on the board's finding on certain issues. Parties are free to formulate requests conditional on the board's findings on questions to be decided. The condition may also relate to the board's underlying reasons.
- 4.5 What appears unusual in the present case is that the condition defined by the respondent is not the substantive outcome of the board's finding on a request, as is usually the case with auxiliary requests, but rather the underlying reasons for the board's finding, here the reliance on allegedly new facts by the board and the interpretation of the "transparent" feature.
- 4.6 The problem with such conditional requests is that the parties cannot know whether the specified condition will actually be met - the board is of course free to explain its reasons at the oral proceedings, but it is under no obligation to do so, even if it decides on a conditional request which is conditional on the board's reasons. The full written reasons of the board will only be available to the parties after the conclusion of the proceedings and the announcement of the final decision. A party cannot, through such conditional requests, oblige the board to provide its full reasons for its decision before the final decision is issued.
- 4.7 That said, the board sees no reason why such conditional requests could not be formulated by the

parties as a question of principle. Also such requests can contribute to procedural efficiency and can help the board to reach a decision without having to discuss issues that may turn out not to be decisive for the final outcome of the appeal. However, such requests do not bind a board in the sense that a party can oblige the board to conduct the proceedings only in a particular order or only restricted to particular issues as a party wishes, thereby possibly avoiding undesirable outcomes for that party. In proceedings involving several parties other parties are also free to argue why the board should not allow such a conditional request.

- 4.8 In principle, the board is free to conduct the proceedings in any appropriate order and to discuss any issue, as long as the relevant substantive and procedural requests of the parties are properly considered and decided (Article 12(8) RPBA, specifically for oral proceedings, see Articles 15(4) and 15(6) RPBA).
- 4.9 In the present case, the board formally did not allow the higher-ranking procedural requests of the respondent proprietor, in that the board decided not to remit the case for the examination of the main request, nor to stay the proceedings. Instead, the board decided that it was in the position to decide on the main request. The board's conclusion that the subject-matter of claim 1 as granted is not novel over D1 was reached using the interpretation as given in the patent and not on the basis of the board's more broad interpretation as set out in its communication under Article 15(1) RPBA. The respondent's reasons given for the remittal or the staying of the proceedings were, however, clearly conditional on the board's reliance on the

alleged new facts and arguments, which were eventually not relevant for the board's decision on the main request.

4.10 Therefore, the staying of the proceedings is not necessary.

5. **Admission of new auxiliary requests 1 to 12, remittal to the department of first instance, documents B1, B2, and B4 to B10 and R1 to R5**

5.1 The respondent requested and argued for admittance of the new auxiliary requests and remittal. The changes in the legal and factual framework (in particular new documents B1, B2 and B4 to B10) introduced by the board were on the file and as such remained for the other lines of attack also against the auxiliary requests. The changes were unexpected. These circumstances were exceptional within the meaning of Article 13(2) RPBA. The new auxiliary request 1 was based on granted dependent claim 2 (original claim 16). Therefore, this request could not surprise the appellant and *prima facie* fulfilled the requirements of Article 123(2) EPC. Therefore the requirements of Articles 13(1) and (2) RPBA were met.

5.2 The appellant argued for and requested non-admittance of the new requests (auxiliary request 1 to 5 and 12). These were late filed and neither exceptional circumstances nor new facts were apparent. The board's new opinion was not surprising and could not constitute an exceptional circumstance. The appellant did not object to the remittal, should the board admit the auxiliary requests.

- 5.3 The board admits **auxiliary request 1** under Articles 13(1) and (2) RPBA in view of the new evidence (i.e. documents B1, B2 and B4 to B10) introduced by the board in its communication under Article 15(1) RPBA. The board accepts that under the circumstances of the present case the new issues raised by the board represent exceptional circumstances according to Article 13(2) RPBA, given that some of the issues raised by the board were new and may indeed have a non-negligible influence on the allowability of the auxiliary requests pending at the time when the board issued its first communication (see point IV. above). The claims of auxiliary request 1 *prima facie* fulfil the requirements of Article 123(2) EPC, do not appear to give rise to new objections and possibly could overcome the objections against the granted claims. As such they are suitable amendments and their admittance is justified also under Article 13(1), fourth paragraph, RPBA.
- 5.4 Since the board is in principle expected to act as a review instance and since auxiliary request 1 was neither discussed before the opposition division nor in the statement setting out the grounds of appeal nor in the reply to this statement, the board considers that it is justified under the circumstances of the present case to remit the case to the opposition division for further prosecution according to Article 11 RPBA and Article 111(1) EPC.
- 5.5 The board does not decide on the admittance of **auxiliary requests 2 to 5 and 12** in order not to limit the freedom of the opposition division to conduct the proceedings.

5.6 **Auxiliary requests 6 to 11** (the then auxiliary requests 1, 1a, 2 to 4 and 4a) were filed prior to the oral proceedings before the opposition division. Since the division rejected the opposition, these requests and their admittance were not yet discussed. The board sees no reason why these may not have been admissibly filed and therefore sees no reason for not admitting them into the proceedings under Articles 12(2) and (4) RPBA. However, the board does not have to decide their admittance, either. Instead, this is also to be decided by the opposition division, should they be relevant.

5.7 Documents B1, B2 and B4 to B10 were introduced by the board under Article 114(2) EPC in its first communication under Article 15(1) RPBA. The board sees no legal basis for removing them from the file, or for formally not admitting them. They form therefore part of the file. Their prior art status has not been questioned so far. Whether and how they are to be taken into account, e.g. as proof of the common general knowledge, is also a matter for the opposition division.

5.8 As documents R1 to R5 were introduced in direct response to these documents, these documents are also admitted to the appeal proceedings under Article 13(2) EPC.

6. **Rule 106 EPC - objections in respect of procedural defects**

6.1 The board concluded that the objection under Rule 106 EPC is to be dismissed.

6.2 The respondent raised an objection under Article 112a(2) (c) EPC in conjunction with Rule 106

EPC. The respondent argued that, given the board's insistence on introducing new interpretations, claims, alleged facts and evidence (some only with its communication under Article 15(1) RPBA of 3 May 2024) and given that it was supposed to deal with them under Article 13(2) RPBA 2020, the respondent's right to be heard under Article 113 EPC had not been respected.

6.3 The board dismisses the objection under Rule 106 EPC, as the board does not see any new legal and factual framework in respect of the issues discussed for the granted claims and therefore no violation of the right to be heard is apparent. Whether the board had any obligation to issue a communication under Rule 100(2) EPC instead of a communication under Article 15(1) RPBA need not be decided in the present case. As stated in the board's second communication (see point VI. above), the respondent had ample time to react. The difference in the procedural rights of the respondent depending on the form of the communication and thereby the different admittance requirements under Articles 13(1) and 13(2) RPBA may have played a role if the board would not have admitted some amendments precisely due to this difference.

However, the board did admit auxiliary request 1 and also remitted the case as requested. Otherwise the decision on the granted claims was not affected. In particular, the board did not put forward any new interpretations, allegations, factual assertions and evidence in its reasoning regarding novelty of claim 1 of the patent in suit with regard to document D1, but only used interpretations, allegations, facts and evidence (only D1 was used) put forward by the opponent (see above).

6.4 As a side remark, the board observes that new issues raised by a board were explicitly foreseen by the legislator as possible reasons for admitting amendments under Article 13(2) RPBA, see the explanatory remarks to Article 13(2) RPBA 2020 in the OJ EPO 2020, Supplementary publication 1, page 221, right-hand column, third paragraph: *"For example, if a party submits that the Board raised an objection for the first time in a communication, it must explain precisely why this objection is new and does not fall under objections previously raised by the Board or a party. The Board may decide to admit the amendment in the exercise of its discretion"*.

Moreover, the admittance criteria under Article 13(1) RPBA will continue to apply (*idem*, see next paragraph in the explanatory remarks). The substantive implications of amendments and the procedural reasons for submitting them at the given appeal stage must be stated also under the provisions of Articles 12(4), 12(6) and 13(1) RPBA. Accordingly, a party is not necessarily placed in a more difficult procedural position where amendments are triggered by new objections by a board, merely by the board's choice of the form of the communication in preparation for oral proceedings.

7. **Summary**

The subject-matter of claim 1 as granted does not fulfil the requirements of Articles 100(a), 52(1) and 54(1) and (2) EPC (novelty). Consequently, the decision under appeal has to be set aside. New auxiliary request 1 is admitted into the proceedings under Articles 13(1) and (2) RPBA and the case is remitted to the opposition division for further prosecution (Article 11 RPBA and

Article 111(1) EPC). Documents B1, B2 and B4 to B10 and R1 to R5 are admitted to the proceedings. The objection under Rule 106 EPC is dismissed. The proceedings are not stayed in view of the referral G 1/24.

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:



S. Sánchez Chiquero

T. Häusser

Decision electronically authenticated