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**Datasheet for the decision
of 21 March 2019**

Case Number: T 0811/15 - 3.2.05

Application Number: 05798539.2

Publication Number: 1809486

IPC: B42D15/00, B42D15/10

Language of the proceedings: EN

Title of invention:

Security device and security support comprising same

Patent Proprietors:

Oberthur Fiduciaire SAS
Hueck Folien Gesellschaft m.b.H.

Opponents:

Giesecke & Devrient GmbH
De La Rue International Limited
Leonhard Kurz Stiftung & Co. KG

Relevant legal provisions:

EPC 1973 Art. 54, 56
RPBA Art. 13(1)

Keyword:

Novelty - main request (no)

Late-filed auxiliary requests 2 and 4 - admitted (yes)

Inventive step - auxiliary requests 1 to 4 (no)



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Case Number: T 0811/15 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 21 March 2019

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 9 March 2015
revoking European patent No. 1809486 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman M. Poock
Members: S. Bridge
J. Geschwind

Summary of Facts and Submissions

- I. The appeal was lodged by the patent proprietors against the decision of the opposition division revoking European patent No. 1 809 486.
- II. All three oppositions were filed against the patent as a whole based on article 100(a) EPC (lack of novelty, article 54 EPC 1973, and lack of inventive step, article 56 EPC 1973).
- III. Oral proceedings were held before the board of appeal on 21 March 2019 in the absence of respondents II (opponent 2) whose representatives had informed the board by letter dated 19 February 2019 that they would not attend.
- IV. The appellants (patent proprietors) requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request or any one of auxiliary requests 1 to 3 filed under cover of a letter of 12 February 2019 or auxiliary request 4 filed during the oral proceedings.
- V. Respondents I to III (opponents 1 to 3) requested that the appeal be dismissed.
- VI. Claim 1 according to the main request reads as follows:
"Security device comprising a security element composed of:
 - a carrier substrate (1) provided with optically variable effects generating structures (2) situated in a defined area of the said carrier, the said optically variable effects generating structures (2) being holographic structures or diffraction gratings,

- a first reflective layer (3) visible at least where it coincides with the said optically variable effects generating structures (2) and comprising a reflection enhancing material being a metal or an alloy produced by metallization/demetallization processes,
- at least one second distinctive reflective layer (4) visible only outside the optically variable effects generating structures (2) and comprising a reflective material different from that of the first layer (3) and being a metal or an alloy produced by metallization/demetallization processes,

a second optical effect being generated in the spaces between and/or around the optically variable effects generating structures (2) due to different colors of the metals of the first and second reflective layers (3,4)."

VII. Claim 1 according to auxiliary request 1 differs from claim 1 of the main request in that the following texts have been deleted:

- "*or diffraction grating*", and
- "*or an alloy*" (both occurrences).

VIII. Claim 1 according to auxiliary request 2 differs from claim 1 of auxiliary request 1 in that the following texts were replaced:

- "*a metal*" (first occurrence) by "*aluminium*", and
- "*a metal*" (second occurrence) by "*copper*".

IX. Claim 1 according to auxiliary request 3 differs from claim 1 of auxiliary request 2 in that the following text was added before "*a second optical effect ...*":

"the first and the second layers (3) (4) being laid down one on the other in some areas and separated

by at least one intermediate layer(s) in these areas, the intermediate layer comprising a dielectric material".

- X. Claim 1 according to auxiliary request 4 reads as follows:
- "Security device comprising a security element composed of:
- a carrier substrate (1) which will be peeled away when the complete structure is applied on the security support or document, provided with at least one optically variable effects generating structure (2) situated in a defined area of the said carrier, the said optically variable effects generating structure (2) being a holographic structure,
 - a release layer (5)
 - a surface layer vacuum coated with a metal layer (3) constituting a first reflective layer, the surface layer being partially embossed with the optically variable effects generating structure (2) being a microstructure generating an holographic effect,
 - the first reflective layer (3) is a reflection enhancing material being a metal and being visible at least where it coincides with the said optically variable effects generating structure (2), said first reflective layer (3) being partially demetallised outside the optically variable effects generating structure (2), exactly in the parts which are not optically variable in a design pattern to render it transparent, said first reflective layer (3) being 20 to 100 nm thick, the demetallized part of the first reflective layer (3) being treated with a thicker layer of metal

constituting a second distinctive reflective layer (4),

- the second distinctive reflective layer (4) being visible only outside the optically variable effects generating structure (2) and being a reflective material being a metal or an alloy different from that of the first layer (3) and said second reflective layer (4) being 40 to 200 nm thick, and a hot melt adhesive layer (6) being 0.5 to 20 μm thick."

XI. The following documents are referred to in the present decision:

A2: WO03/095228;
A3: WO02/00446;
A4: WO01/03945;
A5: WO03/091042;
A14: WO02/00445.

XII. The arguments of the appellants in the written and oral proceedings can be summarised as follows:

Main request and auxiliary request 1

The final feature of claim 1 is to be understood as defining a first level security feature which is easily observable and recognised by the public, which means that the different colors of the metals of the first and second reflective layers should be clearly visible. This is not the case in document A14, because Al, Ni and Cr are all silvery metals. The colour contrast between Al and Cr documented in document A5 does not involve an underlying dielectric layer and only requires the metals to be disposed side by side. Layer 22 of document A14 is not a reflective layer in the sense of

claim 1, because, according to the calculations of the appellants, only 38% (corresponding to $X = 0.38$) of light is reflected. The microstructure 20 is not disclosed as totally covered by the opaque metal layer 22a. The colour of the semi-reflective layer is not visible and no second optical effect due to different colours of the metals of the semi-reflective coating and the opaque metal coating can be observed. Instead the second optical effect of document A14 is due to the interference effect of layers 22, 23 and 24. In addition, paragraphs [0033] and [0036] of the patent in suit distinguish between "*selective metallisation*" and "*metallisation/demetallisation processes*", so that in those paragraphs, the expression "*metallisation/demetallisation processes*" is understood as metallisation and demetallisation. A demetallisation process is not disclosed in document A14, because the term "*metallization/demetallization*" of claim 1 necessarily includes a demetallisation step. Since there are only a few known masking, deposition and removal techniques, the skilled person can distinguish whether a metal layer was realised by partial metallisation or by "*metallisation/demetallisation processes*" by looking at the borders of the metal layer with suitable instruments.

The subject-matter of claim 1 according to the main request and according to auxiliary request 1 is thus new.

Auxiliary request 2 - Inventive step

The embodiment of figure 5b of document A2 constitutes the closest prior art with metal layer 67 on the hologram and an interference effect created by layers 64 (absorber), 65 (dielectric) and 68 (metal or high

refractive index material). The layers 64, 65 and 68 give rise to a colour effect which is different from that of the metal layer 67 on the hologram. The arguments of the opponents involve hindsight: Since there is already a colour difference, the skilled person has no reason to seek to add a further colour difference which does not add anything more to the first level security feature. Although the skilled person knows about the different colours of different metals such as Al and Cu, he has no reason to modify the security device of document A2. The subject-matter of claim 1 is based on an inventive solution in terms of juxtaposing a holographic rainbow effect with metals of two different colours.

Auxiliary request 3 - Inventive step

The embodiments of figures 5a and 7 of document A2 constitute the closest prior art. However, document A2 does not disclose that the layer 56 (separating the two metal layers 57 and 58 in figure 5a) is a dielectric. The subject-matter of claim 1 is based on an inventive step.

Auxiliary request 4 - Admissibility and remittal

The request corresponds to the examples of the invention (paragraphs [0063] to [0065] of the patent in suit). Essentially the same request was already filed in the first instance, even though it was not admitted. The request was filed again with the grounds of appeal and is thus known to the opponents. If admitted, the case should be remitted to the department of first instance for further prosecution.

Auxiliary request 4 - Inventive step

The embodiments of figures 5a and 5b of document A2 constitute the closest prior art. The subject-matter of claim 1 differs therefrom in terms of the thicknesses of the layers. Document A2 suggests that the layers 67 and 68 (figure 5b) may be deposited in parallel which implies that these layers are of the same thickness. The claimed different thicknesses provide an additional second or third level security feature in combination with the second distinctive reflective layer visible outside the optically variable effects generating structure. The skilled person has no reasons to seek to increase the thickness of the second reflective layer as this would also require increasing the thickness of other layers. Therefore, the subject-matter of claim 1 is based on an inventive step.

XIII. The arguments of the respondents in the written and oral proceedings can be summarised as follows:

Main request and auxiliary request 1

The embodiment of figures 3 and 4A of document A14 anticipates the subject-matter of claim 1 according to the main request and according to auxiliary request 1.

The subject-matter of claim 1 does not require the colours of the first and second reflective layers to be clearly visible directly. Instead the claim wording only requires an otherwise unspecified second optical effect which has to be due to different colors of the metals of the first and second reflective layers.

In the embodiment of figures 3 and 4A of document A14 there are several optically variable effects generating

structures 10, 11, 12 situated in a defined area of the carrier 14 and a further optical effect is generated by the spaces between and/or around the optically variable effects generating structures 20 due to different colors of the metals of the first 22A (aluminium which is generally grey) and second reflective layers 22 (Cr or Ni, the latter having a golden tinge). Any additional colours generated by the thin film effect of layers 22, 23 and 24 do not prevent this from occurring and the additional colours generated by the thin film effect will be modulated by the colours of the layers 22 to 24. The manner in which light is reflected is an inherent property of matter and will be different for different elemental metals, such as Al and Cr or Ni. As the metals of layers 22A and 22 are different, they cannot but give rise to different optical effects. This is already sufficient to fall under the scope of the final feature of claim 1. Furthermore, the person skilled in the art of metallic security features knows as part of his common knowledge that Al in an opaque layer next to Cr in a semi-transparent layer give rise to an easily perceived colour contrast (see document A5, table page 6, "*visuell leicht wahrnehmbarer Farbkontrast*" - in this context the German word "*leicht*" means "*easily*" and not "*barely*", the latter being an incorrect translation).

The method of producing the first and second reflective layers using a metallisation/de-metallisation process is described in document A14, page 14, lines 20 and 21. The expression "*metallisation/demetallisation processes*" of claim 1 does not specify whether the sign "/" stands for "*or*" or for "*and*" - the broad interpretation of claim 1 thus includes both possibilities. In addition, the skilled person cannot tell from the finished product whether it was manufactured by selective metal-

lisation or by metallisation and subsequent demetallisation. Inspecting the borders of the metal layer with suitable instruments only provides an indication of the quality of manufacture but cannot distinguish which of the two methods was actually used to produce the metal layer. The product-by-process limitation "*produced by metallisation/demetallisation processes*" does not limit the security device. Metal layer 22 (Cr or Ni) of document A14 clearly requires metallisation and thus falls under the scope of the claim.

The assumptions used by the appellants for calculating that only 38% of light is reflected do not appear to apply to the embodiment of figures 3 and 4A of document A14. The material (page 14, lines 22 and 23: "*such as Cr, Ni or alloys such as Ni-chrome*") of layer 22 are listed amongst the preferred materials in the patent in suit (paragraph [0021]). Furthermore, according to the description of the patent in suit (paragraphs [0028] and [0022]) layer 4 may be made of material which is known to be transparent and colourless in thin films, such as indium tin oxide ITO: such a material only reflects a very small amount of light. This implies that the reflective layer 4 also only needs to reflect a very small amount of light. Since in particular embodiments the layer 4 may be made of a metal or metallic layer coated or printed with coloured ink (patent in suit, paragraph [0029]), the amount of reflected light will necessarily be decreased by the coating or coloured ink.

The subject-matter of claim 1 according to the main request and according to auxiliary request 1 is thus not new.

Auxiliary request 2 - Inventive step

The embodiment of figure 5b with metal layers 67 and 68 of document A2 forms the closest prior art. The subject-matter of claim 1 only differs therefrom in that the metals are aluminium and copper. The only effect of the choice of these metals is an increased security, due to the use of different metals. The colour contrast between these two metals is only an esthetic effect which does not have any technical significance. This particular choice of metals is merely an additional detailed feature and there is no synergy with any other features. Such a particular choice of metals comes within the routine work of the skilled person and it is in accordance with the suggestion on page 2, lines 4 to 7 of document A2. Therefore the subject-matter of claim 1 does not involve an inventive step.

Auxiliary request 3 - Inventive step

The embodiments of figures 5a and 7 of document A2 constitute the closest prior art. Document A2 discloses that the layer 56 (separating the two metal layers 57 and 58 in figure 5a) can be made of the same material as layer 55 (page 22, lines 19 to 21), which is a dielectric (page 13, lines 24 to 27 which refer specifically to document A4, which identifies a dielectric on page 6, line 9). Thus the subject-matter of claim 1 is not based on an inventive step.

Auxiliary request 4 - Admissibility and remittal

This request should not be admitted, because it differs considerably from the other requests in that there are not only numerous additional features, but also some

features which were broadened. Therefore the request concerns a different object.

Since this object has not been discussed before, respondent III requested the remittal to the department of first instance, if admitted.

Respondent I considered a remittal to be contrary to procedural economy in view of the length of the procedure so far and requested that the request be dealt with by the board, if admitted.

Auxiliary request 4 - Inventive step

The embodiments of figures 5a and 5b of document A2 constitute a possible choice of closest prior art. These embodiments include the additional carrier substrate 51, 61, release layer 52, 62 and adhesive 59, 69. Claim 1 does not prohibit additional intermediate layers 55, 56, 65, 66. Thus the subject-matter of claim 1 only differs therefrom in terms of the thicknesses of the reflective layers and of the adhesive. The claimed thicknesses do not produce any unexpected technical effects.

The embodiment of figure 4A of document A14 constitutes another possible choice of closest prior art. This embodiment also includes the additional carrier substrate 25, release layer 21A and hot melt adhesive layer which is 0.5-20 μm thick. The first reflective layer is made of 20 to 50 nm thick aluminium. Claim 1 does not prohibit additional layers 23 and 24. Thus the subject-matter of claim 1 only differs therefrom in terms of the thicker thickness of the second reflective layer of 40 to 200 nm (instead of the 5-12 nm Ni, Cr or alloy such as Ni-chrome disclosed in document A14).

However, the claimed thickness does not produce any unexpected technical effect.

Furthermore, the claimed thicknesses are not unusual in the art: see document A3 (page 7, lines 3 to 10), which discloses a partially demetallised first reflective layer of 20-100 nm thick aluminium, a thicker layer of 40-200 nm copper and a 0.5-20 μm thick layer of hot melt adhesive.

In consequence, the claimed thicknesses do not go beyond the routine practice of the skilled person.

Therefore, the subject-matter of claim 1 is not based on an inventive step.

Reasons for the Decision

1. *Main request - Lack of novelty vs. document A14*

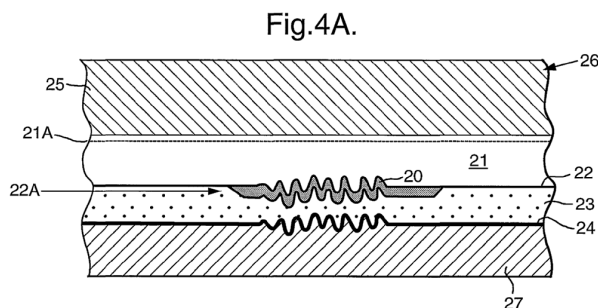
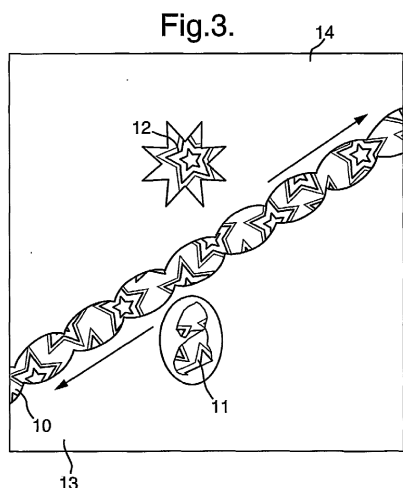
1.1 Understanding the final feature of claim 1

The board cannot follow the appellants' reading of the final feature of claim 1 as necessarily defining a first level security feature, such that the different colours of the metals of the first and second reflective layers must be clearly visible. The actual wording is "*a second optical effect being generated in the spaces between and/or around the optically variable effects generating structures (2) due to different colors of the metals of the first and second reflective layers*". Thus the "*second optical effect*" is not limited to the direct viewing of the different colors of the metals of the first and second reflective layers. Instead it suffices that the "*different colors of the*

metals of the first and second reflective layers" causally contribute to any second optical effect that may be present.

1.2 Document A14 (page 13, line 31 to page 14, line 26, figure 3 and 4A) discloses a security device comprising a security element composed of:

- a carrier substrate 25 provided with optically variable effects generating structures (figure 3: 10, 11, 12; page 14, lines 10 to 13, figure 4A: "holographic imagery 20") situated in a defined area of the said carrier, the said optically variable effects generating structures 20 being holographic structures,



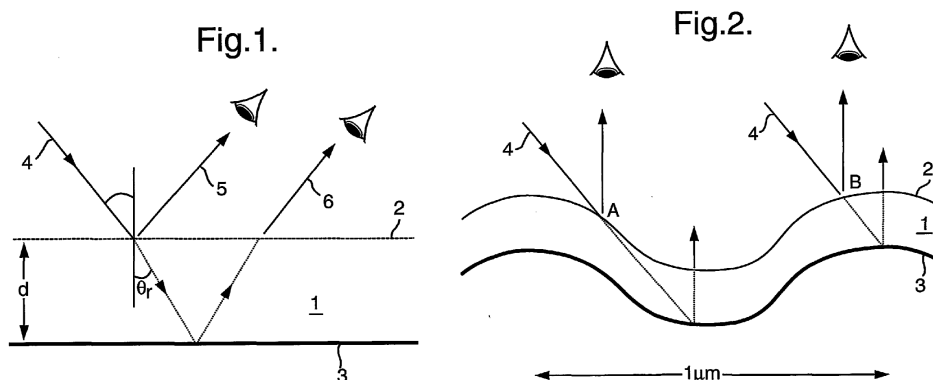
- a first reflective layer 22A visible at least where it coincides with the said optically variable effects generating structures 20 (page 14, lines 16 to 19, figure 4A: "in register with the microstructure 20, as shown") and comprising a reflection enhancing material being a metal or an alloy produced by metallization/demetallization processes (page 14, lines 16 to 21: "An opaque metal coating 22A, for example 20-50nm thick Al", "by applying the metal coating and the [sic] selectively demetallising"),

- at least one second distinctive reflective layer 22 visible only outside the optically variable effects generating structures 20 and comprising a reflective material different from that of the first layer 22A and being a metal or an alloy produced by metallization/demetallization processes (page 14, lines 22 to 23: "*semi-reflective coating 22, such as Cr, Ni or alloys such as Ni-chrome*"), a second optical effect being generated in the spaces between and/or around the optically variable effects generating structures 20 due to different colors of the metals of the first and second reflective layers 22A, 22.

1.3 Claim 1 only requires the first reflective layer to be visible *where* it and the optically variable effects generating structures coincide. Contrary to the arguments of the appellants, there is no requirement in claim 1 for the *first reflective layer* to "*totally cover*" the optically variable effects generating structure. Indeed dependent claim 2 of the main request clarifies that this is not required in claim 1, as claim 2 reads "*Security device according to claim 1, characterised in that the first layer (3) covers only partially the said optically variable effects generating structures (2)*".

1.4 Contrary to the arguments advanced by the appellants, the wording of claim 1 with respect to the second distinctive reflecting layer does not require a minimum amount of light to be reflected from the "*second distinctive reflecting layer*". The semi-reflective layer 22 of document A14 necessarily reflects some of the light falling on it as this is needed for the interference effect of the layers 22, 23 and 24: document A14 discloses that "*the spaces between and/or around the*

optically variable effects generating structures 20" are a "reflection filter acting as an iridescent background" (page 13, lines 31 and 35). This filter require light 4 to be partially reflected 5 and transmitted 6 by the "reflective layer 22" as explained with respect to figures 1 and 2 below:



In the embodiment of figure 4A of document A14 some of the incident light is reflected by layer 22 and this reflected light will necessarily be tinted in accordance with the colour of the metal layer 22 and this colour is different from that of light reflected by layer 22A made from a different metal which therefore has a different colour. The additional colours generated by the interference thin film effect of layers 22, 23 and 24 do not prevent this from occurring since the additional colours generated by the thin film effect will themselves be modulated by the colours of the layers 22 to 24. As the metals of layers 22A and 22 are different, they cannot but give rise to different optical effects, because the manner in which light is reflected is an inherent property of matter and will be different for different elemental metals, such as Al and Cr or Ni. This already ensures that the resulting second optical effect comes within the scope of the final feature of claim 1.

In this context, the board notes that document A5 (table page 6) further documents that Al in an opaque

layer ("*Schicht B*") next to Cr in a semi-transparent layer ("*Schicht A*") give rise to a visually easily perceived colour contrast (see document A5, table page 6, "*visuell leicht wahrnehmbarer Farbkontrast*").

- 1.5 The expression "*produced by metallisation/demetallisation processes*" as used in claim 1 is ambiguous with respect to the meaning of the "/" as "or" or as "and". The broad reading of claim 1 thus includes both possibilities: i.e. it includes (selective) metallisation as an alternative to (selective) demetallisation. Now a metal layer which is disposed only on a particular part of a substrate can only be obtained one of two methods: either by selectively depositing the metal in the desired location (e.g. after applying an oil mask in the areas not to be coated) - this is (selective) metallisation - or by applying a metal coating and then selectively demetallising. For example, this is explained explicitly in document A14 (page 14, lines 19 to 21) with respect to Al layer 22A. Layer 22 (Cr, Ni or alloys) of document A14 is similarly applied only on a particular part of the security device (page 14, lines 22 and 23, figures 3 and 4A): It follows that it necessarily can only have been produced by one of these metallisation/demetallisation processes. In consequence, the layer 22 of the embodiment of figures 3 and 4A of document A14 falls under scope of claim 1 in this respect.

Even if the meaning of the "/" had been limited to "and", the situation does not change for the following reasons. With the reply to the grounds of appeal (letter dated 6 November 2015, page 16, middle paragraph) respondent I challenged whether any technical features of the claimed security device are implied by the product-by-process feature "*produced by metallisation/*

demetallisation processes", because the skilled person is unable to distinguish whether the finished product was manufactured by selective metallisation or by metallisation and subsequent demetallisation processes. Therefore the burden of proof was with the appellants. However, the appellants did not provide any evidence that the skilled person is able to determine from the finished product which one of the two processes was used to manufacture it. Hence, the product-by-process feature "*produced by metallisation/demetallisation processes*" as used in claim 1 cannot distinguish the claimed subject-matter from layer 22 of the embodiment of figures 3 and 4A of document A14.

1.6 In consequence, the subject-matter of claim 1 according to the main request is not new (article 54 EPC 1973).

2. *Auxiliary request 1 - Lack of novelty vs. document A14*

The subject-matter of claim 1 according to auxiliary request 1 only differs from the subject-matter of claim 1 according to the main request in that the alternatives "*or diffraction grating*", and "*or an alloy*" (both occurrences) were deleted from the claim.

Thus the arguments from the main request carry over to claim 1 according to auxiliary request 1, because, in the security device of document A14, the optically variable effects are generated by a holographic structure (page 14, lines 10 to 13) and the first and second reflective layers use metals, respectively Al and Cr or Ni (page 13, lines 16 to 23).

In consequence, the subject-matter of claim 1 according to auxiliary request 1 is not new (article 54 EPC 1973).

3. *Auxiliary request 2 - Lack of inventive step vs. document A2*

3.1 The security device of embodiment of figure 5b of document A2 forms the closest prior art. The layers 64, 65 and 68 give rise to a colour effect based on interference which is different from the colour effect of the metal layer 67 on the hologram (page 7, lines 9 to 10, 26 and 27).

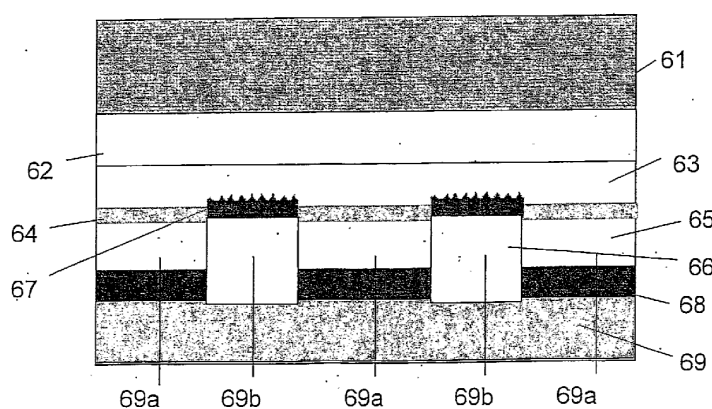


Fig. 5b

3.2 The subject-matter of claim 1 only differs therefrom in that the metal of layer 67 is aluminium and the metal of layer 68 is copper. This was not contentious between the parties.

3.3 As was also argued by the appellants, the different colours of the metals aluminium and copper merely modify the second optical effect already present in the device of document A2. Thus the technical effect of using aluminium and copper for the layers 67 and 68 is that the potential forger will have to apply two different metals. This increases the security, when compared to a device in which only one kind of metal is used.

- 3.4 The corresponding objective technical problem is thus to further increase the security of the device of figure 5b of document A2.
- 3.5 The person skilled in the art of security devices knows as part of his common general knowledge that the security of a device increases when a greater number of different materials is required in its production. This was not contested by the appellants.
- 3.6 In consequence, the use of two different metals is obvious to the skilled person. Furthermore, document A2 discloses the use of (coloured) metals such as aluminium and copper for the reflection layer (page 20, lines 4 to 7). Thus the particular choice of aluminium and copper comes within the routine work of the skilled person starting from the device of figure 5b of document A2 and seeking to further increase the security thereof.
- 3.7 Contrary to the appellants' arguments, the subject-matter of claim 1 is not limited to a solution in terms of juxtaposing a holographic rainbow effect with metals of two different colours (see point 1.1 above).
- 3.8 In consequence, the subject-matter of claim 1 does not involve an inventive step (article 56 EPC 1973).
4. *Auxiliary request 3 - Lack of inventive step vs. document A2*
- 4.1 The security device of the embodiments of figure 5a or 7 of document A2 form the closest prior art.

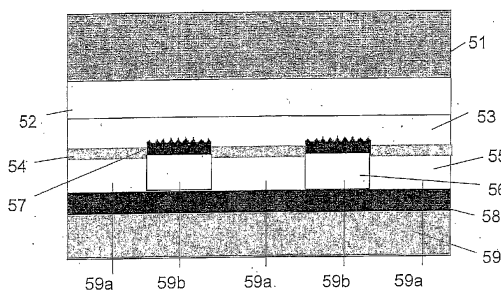


Fig. 5a

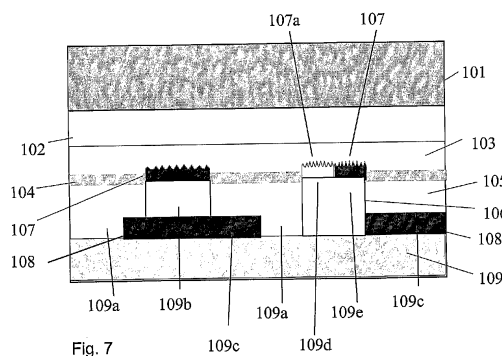


Fig. 7

Document A2 discloses that the layer 56 (separating the two metal layers 57 and 58 in figure 5a) can be made of the same material as layer 55 (page 22, lines 19 to 21), which is a dielectric (page 13, lines 24 to 27 which refer specifically to document A4, page 5, line 30 to page 8, line 5, which in turn discloses the intermediate layer as a dielectric - see page 5, lines 30 to 32).

4.2 Thus, the additional feature of claim 1 according to auxiliary request 3 (*"the first and the second layers (3) (4) being laid down one on the other in some areas and separated by at least one intermediate layer(s) in these areas, the intermediate layer comprising a dielectric material"*) is already disclosed in document A2.

4.3 In consequence, the reasoning concerning the lack of inventive step of the subject-matter of claim 1 according to auxiliary request 2 carries over to subject-matter of claim 1 of auxiliary request 3. It follows that the subject-matter of claim 1 does not involve an inventive step (article 56 EPC 1973).

5. *Auxiliary request 4 - Admissibility and remittal*

5.1 Claim 1 of auxiliary request 4 appears to be *prima facie* based on the embodiments of the invention of paragraphs [0063] to [0065] of the patent in suit.

Essentially the same request was filed again by the appellants/patent proprietors with the grounds of appeal after the, for them, negative decision of the opposition division. The subject-matter of this request is thus known to the opponents who had sufficient time to react to it. The board thus exercised its discretion under article 13(1) RPBA to admit auxiliary request 4 into the procedure.

- 5.2 According to article 111(1) EPC, the Board of Appeal may either exercise any power within the competence of the department which was responsible for the decision appealed or remit the case to that department for further prosecution.

The board considered a remittal to be contrary to procedural economy in view of the length of the procedure so far and thus decided not to remit the case.

6. *Auxiliary request 4 - Lack of inventive step vs. document A14*

- 6.1 The embodiment of figure 4A of document A14 constitutes the closest prior art. This embodiment discloses a carrier substrate 25, a release layer 21A and a hot melt adhesive layer which is 0.5-20 μm thick (page 14, lines 13 to 15; page 15, lines 5 and 6). The first reflective layer is made of 20 to 50 nm thick aluminium (page 14, lines 16 to 19). The second semi-reflective layer 22 consists of 5-12 nm Ni, Cr or alloy such as Ni-chrome (page 14, lines 22 and 23). Note that the units " μm " actually printed on page 14, line 23 are deemed a misprint of "nm", because otherwise the layer would be too thick to be semi-transparent and elsewhere in document A14, the correct units are used (page 5, lines 10 to 12). At the end of the discussions in oral

proceedings, this misprint was no longer contentious between the parties.

6.2 Thus the subject-matter of claim 1 only differs from the security device of figure 4A of document A14 in terms of a thicker thickness of the second reflective layer of 40 to 200 nm (instead of the 5-12 nm disclosed in document A14).

6.3 The claimed thicknesses are not unusual in the art: for example, document A3 (page 7, lines 3 to 10) discloses a partially demetallised first reflective layer of 20-100 nm thick aluminium, a thicker layer of 40-200 nm copper and a 0.5-20 μm thick layer of hot melt adhesive.

In consequence, the claimed thickness of 40-200 nm of the second reflective layer does not go beyond the routine practice of the skilled person.

6.4 It was argued on behalf of the appellants that the difference in thicknesses of the first and second reflective layers provide an additional second or third level security feature. However, this is also the case for a thinner second reflective layer such as disclosed in document A14. Such an additional second or third level security feature does not prevent the skilled person from considering a thicker second reflective layer which also differs from the thickness of the first and reflective layer as part of his routine practice.

6.5 Therefore, the subject-matter of claim 1 is not based on an inventive step (article 56 EPC 1973).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



N. Schneider

M. Poock

Decision electronically authenticated