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Datasheet for the decision of 14 July 2015

Case Number: T 2388/11 - 3.2.05

Application Number: 99900829.5

Publication Number: 1054778

IPC: B42D15/00

Language of the proceedings: EN

Title of invention:
Security document having visually concealed security indicia

Patent Proprietor:
Innovia Security Pty Ltd

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

Headword:

Relevant legal provisions:
EPC Art. 123(2)
EPC 1973 Art. 56
RPBA Art. 12(4)

Keyword:
Admittance of requests filed with the statement setting out the grounds of appeal - (yes)
Amendments - added subject-matter (no)
Inventive step - (yes)

This datasheet is not part of the Decision.
It can be changed at any time and without notice.

Decisions cited:
G 0009/91

Catchword:

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D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2388/11 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 14 July 2015

Appellant: (Patent Proprietor)	Innovia Security Pty Ltd Potter Street Craigieburn, VIC 3064 (AU)
Representative:	Paul James Misselbrook Appleyard Lees 15 Clare Road Halifax HX1 2HY (GB)
Respondent I: (Opponent 03)	Giesecke & Devrient GmbH Patent und Lizenzen Prinzregentenstrasse 159 81677 München (DE)
Respondent II: (Opponent 01)	De La Rue International Limited De La Rue House, Jays Close, Viables Basingstoke, Hampshire RG22 4BS (GB)
Representative:	Robert Edmund Skone James Gill Jennings & Every LLP The Broadgate Tower 20 Primrose Street London EC2A 2ES (GB)
Respondent III: (Opponent 02)	Leonhard Kurz Stiftung & Co. KG Schwabacher Strasse 482 90763 Fürth (DE)
Representative:	Norbert Zinsinger Louis Pöhlau Lohrentz Patentanwälte Postfach 30 55 90014 Nürnberg (DE)

Decision under appeal: **Decision of the opposition division of the**

Composition of the Board:

Chairman M. Poock
Members: H. Schram
D. Rogers

Summary of Facts and Submissions

I. On 18 November 2011 the appellant (patent proprietor) lodged an appeal against the decision of the opposition division, posted on 19 September 2011, by which European patent No. 1 054 778 was revoked. The statement setting out the grounds of appeal was filed on 13 January 2012.

II. Oral proceedings were held before the board of appeal on 14 July 2015. The representative of respondent I (opponent 03) informed the board with letter of 11 June 2015 that respondent I would not attend the oral proceedings.

III. The appellant requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of any of the sets of claims filed as main request and first to fourth auxiliary requests filed on 13 January 2012, and upon the basis of pages 2 to 5 of manuscript amended description received during oral proceedings before the board on 14 July 2015 at 13.30 hours.

Respondents I, II and III (opponents 03, 01 and 02) requested that the appeal be dismissed.

IV. Claims 1 and 15 of the main request read as follows:

"1. Security document (1) with security indicia (21) for preventing unauthorised reproduction, the security indicia (21) characterised in that

the security indicia (21) are formed of transparent windows (8, 9) formed through the security document (1) and being formed to be detectable in transmitted light,

the security document (1) having a complex security pattern (20) and the security indicia (21) are located within the bounds of the security pattern (20) acting to visually conceal the security indicia in reflected light,

the security pattern (20) being formed of one or more elements and having a complexity selected to conceal the security indicia in reflected light,

the security document comprising a transparent substrate (2) having first (3) and second (4) opposite faces, and opaque layer (5, 6) applied to each of said opposite faces,

said windows being comprised of said transparent substrate and of laser ablated apertures formed through said opaque layers, leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia."

"15. A method of forming a security document (1) with security indicia (21) for preventing unauthorised reproduction, the method including the steps of:

providing a transparent substrate (2) having first and second opposite faces;

applying at least one opacifying ink layer (5, 6) to the substrate (2);

characterised by the steps of:

applying at least one complex security pattern (20) to the security document, and

forming the security indicia (21) within the bounds of the security pattern (20) as transparent windows (8, 9) by apertures through said at least one opacifying layer, the transparent windows being formed through the security document,

wherein the pattern (20) is formed from one or more elements and has a complexity selected to conceal the security indicia in reflected light,

the security indicia (21) formed by the windows (8, 9) being detectable in transmitted light,

wherein an opacifying ink layer (5, 6) is applied to each of said opposite faces of the transparent substrate (2) and the transparent windows (8, 9) forming the security indicia (21) are formed by said transparent substrate and superposed apertures (8, 9) in the opacifying ink layers on said opposite faces of the substrate, and wherein the superposed apertures (21) are formed by laser ablation of areas of said opacifying ink layers (5, 6).”

V. The following documents were inter alia referred to in the appeal proceedings:

E2 WO 97/18092;

E5 WO 83/00659;

E17 WO 97/47478.

VI. The arguments of the appellant, in writing and during the oral proceedings, can be summarized as follows:

The main request and the first to fourth auxiliary requests submitted with the grounds of appeal should be admitted.

Support of the amendment of “at least partly transparent windows” to “transparent windows” in claim 1 of the main request was found at page 5, lines 11 and 12, page 6, line 31, and page 7, line 10, each of which referred to “the transparent windows”. Support for the

amendment of "an at least partially transparent substrate" to "a transparent substrate" was found at page 5, lines 2 and 3, which referred to "the transparent substrate". Support for the amendment from "one or more opaque layers applied to at least one of the faces" to "an opaque layer applied to each of said opposite faces" was found at page 4, lines 1 and 2, which referred to "opaque layers are respectively applied to the faces 3 and 4 of the substrate 2", and in the paragraph from page 4, line 25 to page 5, line 10. Support for the amendment from "said windows being comprised of apertures formed through one or more of the opaque layers" to "said windows being comprised of said transparent substrate and of laser ablated apertures formed through said opaque layers, leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia", was found in the paragraph from page 4, line 25 to page 5, line 10 of the application as filed. The underlined expression did not imply that more than one laser source was used to form the apertures in the opaque layers 5 and 6, and had a basis in the paragraph bridging pages 4 and 5, which described a laser beam which ablated an aperture in layer 6 and then travelled through the transparent substrate to ablate an aperture in layer 5. Further, the skilled addressee would realise that it would be impractical to use two different laser beams for different laser sources when one laser source was sufficient. Product claim 1 of the main request thus met the requirements of Article 123(2) EPC, and that applied also to method claim 15 of the main request. The expression "applying at least one opacifying layer to the substrate" at the beginning of claim 15 of the main request did not lead to a lack of clarity in view of the feature "an opacifying ink layer (5, 6) is

applied to each of ... the faces of the transparent substrate" at the end of said claim, since the latter expression stated more precisely the number of opacifying layers, Article 84 EPC 1973.

Document E2 disclosed a security document with security markings formed by holes. The holes were produced with laser beams which burned holes through the carrier substrate. Page 5, line 34, of document E2 referred to a method in which the security marking was applied to a banknote of pure cotton paper with a thickness of between 80 and 95 µm. Such a cotton substrate would, at the most, be translucent but would not be 'transparent' as claimed in claim 1 of the main request. The only other mention of the nature of the carrier substrate was at page 6, lines 17-19, which recited: "However, the invention can also be used with other carriers, such as plastic carriers". The mere mention of plastic carriers fell short of disclosing a transparent substrate, because a plastic substrate could be opaque. The difference between the holes of document E2 and the "transparent windows comprised of the transparent substrate and laser ablated apertures formed through said opaque layers" of the invention was that said windows implied a barrier, ie the transparent substrate. A possible disadvantage of the arrangement of document E2 was that forming holes completely through a banknote carrier could make the banknote more susceptible to tearing, in particular if the mutual distance to neighbouring holes was small. For that reason a minimum mutual distance of 700 µm had to be observed, see page 5, lines 15 to 18, and page 6, lines 9 and 10. There was no need for the skilled person starting from document E2 to find a further solution to reduce the susceptibility to tearing.

Document E5 disclosed a banknote formed of a transparent polymer film having opaque layers on opposite sides, with the opaque layers in such a way as to leave a large transparent area or window for inspection of a security device incorporated in the polymer film. There was no teaching or suggestion in document E5 of providing security indicia in the form of windows comprised of the transparent film and laser ablated apertures in register on opposite surfaces of the transparent film. Therefore a combination of the teachings of E2 and E5 would fall short of the claimed invention.

VII. The arguments of the respondents, in writing and during the oral proceedings, can be summarized as follows:

The main request did not correspond to any of the requests considered by the opposition division in its decision. In particular, there was no version of claim 1 in the decision under appeal corresponding to claim 1 of the present main request. This was primarily due to the presence of the last clause in claim 1 of the main request specifying "leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia". The purpose of the appeal procedure was mainly to give the losing party a possibility to challenge the decision of the opposition division on its merits and to obtain a judicial ruling on whether the impugned decision was correct. For this reason, the main request should not be admitted into the appeal proceedings.

The wording "laser ablated apertures" in claim 1 of the main request encompassed the possibility that a first laser source was used to form an aperture in the opaque

layer 6 and a second source to form an aperture in the opaque layer 5, or that a single laser source travelling through the transparent substrate was used to form said apertures. Since there was only a basis in the application as filed for the latter possibility, the amendment was an intermediate generalisation. Since a "transparent substrate" was only disclosed for a clear plastics substrate (page 4, lines 3 to 5), the "transparent substrate" was also an intermediate generalisation. The deletion of the wording "at least partially" in the expression "at least partially transparent substrate" had the effect that the sentence "Opaque layers 5 and 6 are respectively applied to the faces 3 and 4 of the substrate 2" on page 4, lines 1 and 2, was no disclosure of the feature "an opaque layer (5, 6) applied to each of said opposite faces of a transparent substrate". The reason was that "the substrate 2" in said sentence referred to "a[n] substrate 2" in the preceding sentence, which was not transparent. The term "opaque [layer]" in claim 1 of the main request was an intermediate generalisation, since only "opacifying ink" layers were disclosed for the transparent substrate described on page 3, line 14 ff. The underlined text in the feature "said windows being comprised of said transparent substrate and of ... apertures formed through said opaque layers" was not disclosed in the application as filed (cf page 3, lines 11 and 12, reading "The windows may be comprised of apertures formed through one or more of the opaque layers"). The features "said transparent substrate and of laser ablated [apertures]" and "leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia" were not disclosed in the application as filed with respect to opaque layers (only with respect to opacifying ink layers). Moreover, the

substrate should be such that the laser beam travelled through it substantially unimpeded, ie little or no absorption of the radiation should take place in the substrate. The above objections applied to claim 15 of the main request as well. Claims 1 and 15 of the main request were therefore amended in such a way that they contained subject-matter extending beyond the content of the application as filed, contrary to Article 123(2) EPC. Claim 15 of the main request was not clear, since the claim required on the one hand "applying at least one opacifying layer to the substrate" and on the other hand that opacifying layers were applied to both sides of the substrate.

Respondents I and II have submitted that the subject-matter of claims 1 and 15 of the main request did not involve an inventive step with respect to document E2 alone, or a combination of documents E2 and E5.

Document E2 disclosed a transparent substrate or carrier, transparent in the sense that light can pass through it. This followed from the passage on page 4, line 30 to page 5, line 2, from which it could be incurred that without motif 5 the holes would not be easily visible and hence the carrier let light through. This document further disclosed that the windows were defined at least partly by the holes formed in the substrate and thus were comprised of the substrate. The notion “window” in claim 1 of the main request could be construed as including both the transparent window itself and the “window frame”. The subject-matter of claim 1 of the main request differed from the security document known from document E2 only in that there was no disclosure of a second opaque layer on the reverse side of the carrier. Since double-sided printing of banknotes was well-known in the art, it was obvious to

provide such a second layer, also with a view to improve the visibility of the holes in transmission and to reduce the visibility in reflection. It was also obvious to the skilled person to provide a second opaque layer in view of document E5. This document described a security document with a substrate comprising a transparent polymeric film and an opacifying coating applied to both sides of the substrate so as to leave an area of the substrate uncoated and transparent (page 3, Abstract, lines 6 to 13 and lines 20 to 26). The skilled person would recognize the equivalence between the concepts of documents E2 and E5.

If claim 1 of the main request excluded pierced openings, said claim differed from the security document known from document E2 further in that the windows included the substrate. However, document E5 taught that for providing transmission security tokens it was not necessary to punch out holes in the substrate (page 2, lines 15 to 20).

Respondent I has submitted in writing that the subject-matter of claim 1 of the third auxiliary request did not involve an inventive step with respect to document E17.

Reasons for the Decision

1. The appeal is admissible.

2. *Admittance of the main request of the appellant*

2.1 It lies within the power of the board to hold inadmissible facts, evidence or requests which could

have been presented or were not admitted in the first instance proceedings, cf Rule 12(4) RPBA.

The main request filed by the appellant with its statement of grounds are considered by the board as an appropriate attempt to overcome the objections raised in the opposition proceedings.

2.2 In its decision G 9/91 (OJ EPO 1993, 408, point 18 of the Reasons), the Enlarged Board of Appeal stated the following: "*The purpose of the appeal procedure inter partes is mainly to give the losing party the possibility of challenging the decision of the Opposition Division on its merits*." The Enlarged Board held (cf point 18) that with regard to fresh grounds for opposition, such grounds may in principle not be introduced at the appeal stage.

It follows from the above that bringing an entirely fresh case would not be in line with the purpose of the appeal proceedings. Challenging the decision of the opposition division on its merits does not exclude the filing of requests that were not considered in that form by the opposition division.

The feature "windows being comprised of said transparent substrate and of [superposed] laser ablated apertures formed through said opaque layers" in claim 1 was present in the fourth auxiliary request considered in the opposition proceedings (see point 5.1 of the decision under appeal). The incorporation of the additional feature "leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia" at the end of claim 1 of the present main request by the appellant, is not tantamount to bringing an

entirely fresh case, since the additional feature merely concerns the result obtained of providing laser ablated apertures in the way described in paragraph [0026] of the patent in suit.

In exercising the discretion given to the board under Rule 12(4) RPBA, the main request is admitted into the appeal proceedings.

3. *Allowability of the amendments, Article 84 EPC 1973 and Article 123 EPC*

3.1 Claim 1 of the main request differs from claim 1 as granted in that

(1) the wording "at least partly" in the expression "security indicia (21) are formed of at least partly transparent windows" has been deleted;
(2) the wording "an at least partially" in the expression "the security document comprising an at least partially transparent substrate" has been replaced by the word "a";
(3) the expression "one or more opaque layers (5, 6) applied to at least one the faces" has been replaced by the expression "an opaque layer (5, 6) applied to each of said opposite faces"; and
(4) the expression "[said windows being comprised of] apertures formed through one or more of the opaque layers" has been replaced by the expression "[said windows being comprised of] said transparent substrate and of laser ablated apertures formed through said opaque layers, leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia".

Amendment (1)

The passage on page 3, lines 8 and 9, of the published version of the application as filed (henceforth all references to page numbers in point 3 pertain to said version of the application as filed) discloses that the security indicia are comprised of at least partly transparent windows through the security document (see also page 4, lines 20 and 21). The wording "at least partly transparent windows" includes "transparent windows". Transparent windows are also disclosed on page 5, lines 11 to 14.

Amendment (2)

A security document comprising an at least partially transparent substrate is disclosed on page 3, line 30. For the same reason as given for amendment (1), the wording "at least partially transparent substrate" includes a transparent substrate.

Amendment (3)

A basis for the feature "an opaque layer (5, 6) applied to each of said opposite faces" is page 3, lines 10 to 12, and page 4, lines 1 and 2.

Amendment (4)

A basis for the first half-sentence of amendment (4), viz "said windows being comprised of said transparent substrate and of [laser ablated] apertures formed through said opaque layers" without the wording between square brackets, is page 3, lines 12 and 13. A basis for the second half-sentence of amendment (4), viz "leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia" is the sentence on page 5, lines 8 to 10. That sentence is the last sentence of a passage on page 4, line 25, to page 5,

line 10, and summarizes one technique (described in Australian patent application PO5239, cf EP-B 0 961 690) how transparent windows may be formed, namely by using a laser beam that impinges on and acts on one side of the security document, leading to ablation of opaque layer 6. The laser beam 11, having ablated layer 6, travels through the transparent substrate 2 until it impinges on the surface of opaque layer 5 located on the other side of the security document 1, leading to ablation of opaque layer 5.

The respondents have submitted that the wording "laser ablated apertures" in claim 1 of the main request encompassed the possibility that a first laser source was used to form an aperture in the opaque layer 6 and a second source to form an aperture in the opaque layer 5, or that a single laser source travelling through the transparent substrate was used to form said apertures. Since there was only a basis in the application as filed for the latter possibility, the amendment was an inadmissible intermediate generalisation.

This cannot be accepted. The beginning of said passage, which reads: "Such at least partly transparent windows may be formed in a variety of ways. According to one technique ...", gives the person skilled in the art a clear indication, that if a laser ablation technique is used to form ablated apertures trough the opaque layers, that said technique is not restricted to the one technique described in said passage.

3.2 The respondents have further submitted that:

(i) A transparent substrate was only disclosed for a clear plastics substrate (page 4, lines 3 to 5),

so that amendment (2) constituted an intermediate generalisation.

(ii) The deletion of the wording "at least partially" in the expression "at least partially transparent substrate" had the effect that the sentence on page 4, lines 1 and 2, viz "Opaque layers 5 and 6 are respectively applied to the faces 3 and 4 of the substrate 2", was no disclosure of the feature "an opaque layer (5, 6) applied to each of said opposite faces" of a transparent substrate. The reason was that "the substrate 2" in said sentence referred to "a[n] substrate 2" in the preceding sentence, which was not transparent. It followed that amendment (3) also constituted an intermediate generalisation (only opacifying ink layers applied to a transparent substrate were disclosed in the preferred embodiment described on page 3, line 14 ff).

(iii) The feature "said windows being comprised of said transparent substrate and of ... apertures formed through said opaque layers" was not disclosed in the application as filed, cf page 3, lines 11 and 12, reading "The windows may be comprised of apertures formed through one or more of the opaque layers". In other words, the substrate was not part of the windows. The windows were therefore not comprised of the substrate.

With respect to objections (i) and (ii) it is noticed (see the text under amendments (1) and (2)) that the wording "at least partially transparent substrate" includes a transparent substrate. As a result, these objections fail. With respect to objection (iii) it is noticed that the passage on page 3, lines 11 and 12,

does not exclude (cf the wording "comprised of") that the windows further comprise the transparent substrate. From the wording of claim 1 of the main request (cf "leaving a clear or transparent area in register on both surfaces of the transparent substrate") is it clear that the transparent substrate is present between the ablated areas of the opaque layers (see also point 4).

3.3 It follows that claim 1 of the main request does not contain subject-matter that extends beyond the content of the application as filed and thus meets the requirements of Article 123(2) EPC. This holds mutatis mutandis for the corresponding amendments of claim 15 of the main request.

3.4 Respondent II has raised the following clarity objection against claim 15 of the main request. Whilst the last feature of the characterising part of said claim required that an opacifying ink layer was applied to each of the opposite faces of the substrate, the last feature of the preamble reads "applying at least one opacifying ink layer (5, 6) to the substrate (2)", thus rendering the claim unclear.

This cannot be accepted. It is not uncommon that features of the preamble of a claim define certain features of the claim in a general way (namely, as far as they are known in combination from a prior art document), which are then specified in more detail in the characterising part of said claim.

It follows that claim 15 and likewise claim 1 of the main request meet the requirements of Article 84 EPC 1973.

4. *Interpretation of claim 1 of the main request*

4.1 The first and last characterising features of claim 1 of the main request read:

"the security indicia (21) are formed of transparent windows (8, 9) formed through the security document (1) and being formed to be detectable in transmitted light", and

"said windows being comprised of said transparent substrate and of laser ablated apertures formed through said opaque layers, leaving a clear or transparent area in register on both surfaces of the transparent substrate in the shape of the desired security indicia".

While the first characterising feature does not exclude that the windows are openings or holes extending through the security document, the last characterising feature makes it clear that the windows extend through the security document and include the substrate between the apertures or openings 8, 9 as well as the apertures or openings 8, 9 themselves. That the windows include the substrate follows from the feature "leaving a clear ... area in register on both surfaces of the ... substrate", see eg the window at the left of Figure 1. Claim 1 of the main request thus excludes that the substrate between openings 8, 9 is missing.

4.2 The term "complexity" in claim 1 of the main request is defined (see paragraph [0031] of the patent in suit) as the visual confusion or distraction that such a security pattern causes to the eye of a person viewing the security document in reflected light conditions.

4.3 The wording "security indicia (21) are formed of transparent windows" in claim 1 of the main request must be construed in the light of the description of the patent specification read as a whole that the security indicia may be readily viewed in transmitted light (see paragraph [0027] of the patent in suit). Dictionary definitions of the word "transparent", which include "permitting the uninterrupted passage of light"; "easy to see through"; and "able to be seen through", may be helpful in this respect, but are not of overriding importance.

5. *Ground for opposition under Article 100(a) EPC 1973 in combination with Article 56 EPC 1973*

5.1 Document E2 represents the closest prior art. This document discloses (see page 2, lines 10 to 31, page 4, lines 14 to 16, claim 1 and Figure 2) a security document with a security marking 6 comprising a plurality of holes 11 having a diameter in the range from 85 to 130 µm. These holes form a pattern on the document that is visible in transmission, but almost invisible for the inexperienced observer when viewed in reflection without optical aids. The holes can be prepared by laser light (or other suitable radiation) as well as with discharge sparks (page 2, lines 28 to 31). The holes are arranged in an absorbing, substantially completely coloured, printed or coated area ("field 5"), with a view to improve contrast (see page 2, lines 32 to 37, and page 4, line 30 to page 5, line 2). Since in said areas the transmission of the document is low, the holes are visible when holding the document against a light source and the recognisability of the marking is increased. The mutual distance between the holes should be at least 0,7 mm to prevent tearing of the document between the holes (see page 5,

lines 15 to 17). In that case the paper's resistance to tearing is not affected (page 6, lines 9 and 10). The security document preferably has a paper carrier (page 4, line 6), but other carriers, such as plastic carriers, can also be used (page 6, lines 17 to 19).

Whilst document E2 discloses that the security marking 6 is located in a field 5 (or "absorbing area", see claim 5) of the bank note that is uniformly coloured, printed or coated, or has a structure much finer than the holes (whereby the security marking 6 and the field 5 correspond to the security indicia and the security pattern of the invention, respectively), this document does not disclose that field 5 acts "to visually conceal the security indicia in reflected light" (since the holes are so small that they are already practically invisible in reflected light) and for the same reason does not disclose that field 5 "having a complexity selected to conceal the security indicia in reflected light". If the transmission of field 5 is sufficiently low, the security marking consisting of through-going holes forming a pattern is visible when viewed in transmission. The degree of transparency of the carrier, unlike the substrate of the invention, does not affect the visibility of the security marking in transmission, because the holes are "empty", ie free from carrier material. Document E2 neither discloses that field 5 is opaque nor that both faces of the document — at the area where the security marking 6 is located — are substantially completely coloured, printed or coated. While it can be concluded from the passage on page 4, lines 30 to 34, of document E2 that the paper carrier is, to a certain extent, optically transparent , this document does not disclose that field 5 applied to one face of the document can be "readily viewed" (see point 4.3 above) from the other

side of that document if that side is not coloured, printed or coated.

A central teaching of document E2 is that the security marking comprises a plurality of holes through the whole thickness of the document, ie carrier and absorbing area. In contrast, claim 1 of the main request requires that "said windows being comprised of said transparent substrate". This is a major difference between the claimed security document of the invention and the security document of document E2.

5.2 Respondent I has submitted (see point VII above, last paragraph) that the subject-matter of claim 1 of the third auxiliary request did not involve an inventive step with respect to document E17. The board assumes that this submission also applies to claim 1 of the main request.

Ignoring the product-by-process feature (in italic), viz "[said windows being comprised of said transparent substrate and] *of laser ablated* [apertures formed through said opacifying ink layers], *by exposing a first opacifying ink layer on one face of the transparent substrate to a laser beam which ablates or removes particles to form an aperture in said layer, the laser beam travelling through the transparent substrate substantially unimpeded until it impinges on and ablates or removes particles from a second opacifying ink layer on the opposite face of the substrate* [to form an aperture in the second opacifying ink layer in register with the aperture in the first opacifying ink layer], respondent I has argued that the subject-matter of claim 1 of the third auxiliary request differed from the security document known from document E17 (see page 13, lines 1 to 9, Figure 4, page

14, line 22 to page 15, line 12) only in that the apertures in the first and second opacifying ink layers were in register.

Respondent I considers the empty regions around the four indicia 7 and the empty regions around the four indicia 9 shown in Figure 4 as "security indicia" in the meaning of claim 1 of the third auxiliary request. In Figure 5a (described on page 15, line 18 to page 16, line 4) said empty regions correspond to the "complement" of the lines within blocks 11A, 11B and 11C within the boundary of the emblem, ie everything that is shown in white constitute the "security indicia", whereas said lines correspond to the parts of the opaque layers 5, 6 mentioned in the claim that are not ablated. The security document shown in Figures 3 and 4 has first indicia 7 printed on patch 10, and second indicia 9 (only in Figure 4 also printed on a patch). Patch 10 (described on page 14, line 1 as an iridescent patch) may include a partially metallised surface, and may be applied directly on the surfaces 6, 8 of the substrate 1 in very fine dots (page 14, lines 22 to 38).

Respondent I has submitted that this metallisation was a pattern concealing the security indicia in reflected light. However, apart from the question whether the metallisation constitutes a security pattern having a complexity selected to conceal the security indicia in reflected light, the metallisation on surface 6 of the substrate reveals rather than conceals the first indicia 7 and the complement thereof (it does only conceal the second indicia 9 and the complement thereof, respectively), see page 13, lines 4 to 7.

Whilst the complements of the indicia 7, 9 of document E17, if they were formed in register, would be formed of windows that are sufficiently transparent to allow them, despite the presence of the metallisation applied to the substrate, to be viewed from one side of the substrate under transmission conditions, said windows do not comprise a clear area "in register on both surfaces of the transparent substrate in the shape of the desired security indicia", in view of the metallisation applied to the substrate.

Document E17 is therefore a more remote prior art document than document E2 and cannot qualify as the closest prior art document.

5.3 Document E5 relates to a bank note or other security token comprising a substrate 24 bearing printed or other identifying indicia and at least one optically variable security device 32, said substrate comprises a transparent bi-axially-oriented polymeric film composite having heat-activated adhesive coating and an opacifying coating (page 3, lines 3 to 13, claim 1 and Figure 3). The substrate, indicia and optically variable device are covered with a transparent protective layer of polymeric material intimately bonded to the substrate.

In the section "Background art" (see page 2, lines 1 to 13) it is stated that in the prior art, where a substrate was bonded to a central fibrous web and where a security device was employed which depended for its optically variable properties upon the transmission of light, it was necessary to punch out a hole in the substrate, insert the device and bond it in place with further layers of transparent plastic sheet material. These devices were complex and relatively expensive.

Moreover, when transmission security devices were inserted in pockets in the substrate, an area of weakness and high stress was created which reduced both durability and security.

For this reason the invention according to document E5 proposed another design construction without the complication and expense of the central fibrous web and without necessitating the damaging discontinuity previously required when transmission security tokens were employed (page 2, lines 15 to 20).

5.4 The person skilled in the art, starting from the security document known from document E2, has no incentive to refrain from making through-going holes in the security document, since that would go against the teaching of document E2.

Document E5 discloses inter alia that an optically variable security device 32 can be transferred from a transfer foil onto a substrate, see Figure 2, and that is no longer necessary to punch out a hole for inserting said device in the substrate. Document E5 does not disclose a security document having security indicia formed of transparent windows comprised of a transparent substrate.

It follows that it was not obvious to the person skilled in the art, starting from document E2, to refrain from making through-going holes and instead provide security indicia formed of transparent windows comprised of a transparent substrate.

5.5 Consequently, the security document of claim 1 and the method of forming a security document of claim 15 of the main request involve an inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent as amended in the following version:

Claims:
No. 1 to 16, filed as main request on 13 January 2012;

Description:
Pages 2 to 5 filed during oral proceedings before the board on 14 July 2015 at 13.30 hours;

Drawings;:
Figures 1 to 4 of the patent specification.

The Registrar: The Chairman:

D. Meyfarth M. Poock

Decision electronically authenticated