Case Number: T 1462/09 - 3.2.05
Application Number: 05746962.9
Publication Number: 1641627
IPC: B42D 15/00
Language of the proceedings: EN
Title of invention: Process for providing markings on security papers
Patent Proprietor: KBA-NotaSys SA
Opponent: Giesecke & Devrient GmbH
Headword: -
Relevant legal provisions: -
Relevant legal provisions (EPC 1973): EPC Art. 56, 114(2)
Keyword: "Request to overrule the way in which the opposition division has exercised its discretion under Article 114(2) EPC 1973 - refused" "Inventive step - yes"
Decisions cited: G 0007/93
Catchword: -
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DECISION
of the technical board of appeal 3.2.05
of 20 June 2013

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Decision under appeal: Decision of the opposition division of the European Patent Office posted 12 May 2009 rejecting the opposition filed against European patent No. 1641627 pursuant to Article 101(2) EPC.

Composition of the board:
Chairman: M. Poock
Members: H. Schram
G. Weiss
Summary of Facts and Submissions

I. On 2 July 2009 the opponent lodged an appeal against the decision of the opposition division posted on 12 May 2009, by which its opposition against European patent No. 1 641 627 was rejected. The statement of grounds was filed on 1 September 2009.

II. Oral proceedings were held before the board of appeal on 20 June 2013.

The appellant (opponent) requested that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed.

III. The documents referred to in the appeal proceedings included the following:

D1 WO 94/15319,

D4 WO 01/59745,

D5 EP-A 1 364 809,

D6 EP-A 0 420 261,

D7 US 6,505,779.
IV. Claim 1 of patent as granted reads as follows:

"1. A process for providing at least one composite identity marking on a substrate (1) of a security document, wherein said composite identity marking comprises a first identity marking and at least one second identity marking, wherein said first identity marking is provided by a first marking station (5, 5', 5'', 5'''), and wherein said second identity marking is provided by a second marking station, wherein a first side of said substrate (1) is brought into marking relationship with said first marking station (5, 5', 5'', 5'''), wherein said second marking station includes a laser marking station (6, 6') for producing a laser beam, wherein a portion of the second side of said substrate (1) is provided with a layer of material (60) capable of absorbing a substantial amount of radiation emitted by the laser beam, characterized in that the laser beam is directed onto said layer of absorbing material (60) through said first side and across said substrate to form said second identity marking only on said second side of the substrate (1)."

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

The opposition division admitted document D7 into the opposition proceedings. This document was taken into account in the decision under appeal. The request of the respondent to "undo" the admittance of this document in the proceedings should be refused, since it was a relevant document. This also followed from the fact that during the examination proceedings the respondent incorporated a reference to this document in
the description of the patent in suit, see paragraph [0005]. It should not be excluded from the appeal proceedings.

Document D5 formed the closest prior art document. This document disclosed all the features of the preamble of claim 1 including "... a laser marking station (6, 6') for producing a laser beam". The last feature of the preamble was known per se in the art as admitted by the appellant in its reply to the opposition of 6 March 2008, point 2.2. Document D5 left open which side of the substrate was marked by the laser beam, the front or the back side. The technical difference between claim 1 and the process known from document D5 was merely to prepare the substrate in such a way, that when the substrate passed through the numbering machine shown in figure 1 the laser beam formed the second identity marking only on the second side of the substrate. The objective technical problem to be solved was correctly stated in paragraph [0007] of patent in suit as "to create a process producing a double-sided composite identity marking on a security document in the course of a same sheet handling step". The solution of this problem was obvious to the person skilled in the art, namely to provide a portion of the back side of the substrate with a layer of material capable of absorbing a sufficient amount of radiation emitted by the laser beam.

The opposition division held that the problem given in the patent in suit was not correct since it contained a pointer to the solution, namely producing a double-sided composite identity marking. It added: "If the skilled person wants to use the apparatus of D5 to
provide a double-sided marking on the substrate, using a laser marking technology for the second marking station, then it is highly probable that he would think of using the method of feature (1.7) of claim 1 as granted" [ie the characterizing feature], see point 5.6 of the decision under appeal. The opposition division defined the objective technical problem to be solved as "to find an alternative process for providing a composite identity marking on a substrate", see the paragraph bridging pages 7 and 8 of the decision under appeal. This formulation of the technical problem, ie finding an alternative process for providing a composite identity marking on only one side of the substrate, did not lead to a different conclusion. Documents D1, D4, D6 and D7 disclosed that a laser beam could be used to form a marking on the back side of substrate which absorbed its energy by directing it through the front side and across the substrate. In particular, document D7 disclosed a preferred embodiment wherein a marking was made only on the back side of the substrate, see column 2, lines 36 to 41.

The subject-matter of claim 1 as granted lacked therefore an inventive step.

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

Document D7 was filed outside the 9-month time limit for filing an opposition and outside the time-limit of at least one month before the date set for oral proceedings. It was thus filed extremely late. Nevertheless the opposition division held that the respondent should know document D7, since it was
mentioned under "References cited" on the cover of the patent in suit and admitted it into the proceedings. The opposition division should not have admitted said document, since the fact that this document was taken into account during the examination proceedings was not a valid reason to admit it. Moreover, said document was not a pertinent document. Document D7 should therefore not be admitted into the appeal proceedings.

Document D5 disclosed a process for providing composite identity markings on the same side of security papers. It did neither disclose the last feature of the preamble of claim 1 nor its characterizing part. In contrast, the invention proposed a process producing a double-sided composite identity marking on a security document in the course of a same sheet handling step. The advantage of a double-sided composite identity marking was that it improved security against falsification. None of the documents D1, D4 to D7 cited by the appellant suggested to provide a double-sided composite identity marking on a security document in the course of a same sheet handling step.

It followed that the subject-matter of claim 1 as granted involved an inventive step.
Reasons for the Decision

1. The appeal is admissible.

2. Admittance of document D7 into the opposition appeal proceedings

2.1 In exercising its discretion under Article 114(2) EPC 1973, the opposition division admitted document D7 into the proceedings.

2.2 It is established case law that in general "... it is not the function of a Board of Appeal to review all the facts and circumstances of the case as if it were in the place of the first instance department, in order to decide whether or not it would have exercised such discretion in the same way as the first instance department. If a first instance department is required under the EPC to exercise its discretion in certain circumstances, such a department should have a certain degree of freedom when exercising that discretion, without interference from the Boards of Appeal", see G 7/93, OJ EPO 1994, 775, point 2.6 of the Reasons.

A board of appeal should only overrule the way in which a department of first instance has exercised its discretion if it has applied the wrong principles, or not taken account of the right principles, or has acted in an unreasonable way and has thus exceeded the proper limits of its discretion, see G 7/93 (loc. cit.).

2.3 It is noted that document D7 was cited in the International Search Report and that it was subsequently referred to in paragraph [0005] of the
patent in suit. However, the board concurs with the respondent that admitting a late-filed document into the proceedings on the ground that the patent proprietor should know it, because it is cited in the patent, or mentioned on its cover, is not a sufficient reason.

Nevertheless, this is not to say that the opposition division applied the wrong principles, or has acted in an unreasonable way. Since the opposition division referred in detail to the disclosure of document D7 in point 5 ("Inventive step of claim 1 as granted") of the reasons in the decision under appeal (see in particular points 5.4 to 5.6), it can be concluded that the opposition division held document D7 to be a document having a certain relevance for assessing inventive step of claim 1 of the patent in suit.

Moreover, document D7 appears to be prima facie the only document wherein a marking is provided on the rear side of a security document through the front side and across the substrate.

2.4 In the judgment of the board, the opposition division did not act in an unreasonable way by admitting document D7 into the proceedings.

The request of the respondent to overrule the way in which the opposition division has exercised its discretion under Article 114(2) EPC 1973 is therefore refused.
3. Ground for opposition "lack of inventive step", 
Article 100 a) EPÜ 1973 in combination with Article 56 
EPÜ 1973

3.1 Document D5, which is assigned to the same applicant as 
the application that matured into the patent in suit, 
represents the closest state of the art.

This document discloses (see claim 1) a process for 
providing composite identity markings on security 
papers, wherein each composite identity marking 
comprises a first sequentially distributed 
alphanumerical identity marking and at least one second 
identity marking, wherein said first and said at least 
one second identity markings are linked by a 
determining rule, wherein said first identity marking 
is provided by a first marking station and wherein said 
second identity marking is provided by a second marking 
station and wherein said first and second marking 
stations make use of the same or different marking 
techniques, wherein sets of said security papers are 
brought successively into marking relationship with 
said first and second marking stations.

In the embodiment described in paragraphs [0019] to 
[0032] the first marking station ("components 5") works 
according to the technology of mechanical typography 
whereas that the second marking station ("components 
6") can work according to another technology, e.g. ink 
jet technology, laser marking technology, embossment 
technology, or other, see paragraphs [0023] and [0026].

The sheet of banknotes 1 shown in figures 1 and 2 is 
provided with first and second identity markings 50, 60
on the side facing away from the drum 3, i.e., on the same side of sheet 1 (henceforth referred to as "front side"). There is no disclosure in this document that the second identity marking 60 is provided by laser marking technology on a different side of the substrate than the first identity marking 50.

3.2 Claim 1 thus differs from the process known from document D5 in that

(i) a portion of said second side of said substrate (I) is provided with a layer of material (60) capable of absorbing a substantial amount of radiation emitted by the laser beam, and in that

(ii) the laser beam is directed onto said layer of absorbing material (60) through said first side and across said substrate to form said second identity marking only on the second side of the substrate (I).

The first distinguishing feature ensures that the second identity marking can indeed be formed on the second side of the substrate by the laser beam. The second distinguishing feature means that the second identity marking is formed only on the second side of the substrate (on the "back side"), whereby the second marking station is located at the front side of the substrate. The invention thus proposes a process for producing first and second identity markings on different sides of a security document, rather than on the same side as in document D5.
The objective technical problem to be solved for the person skilled in the art, is therefore to adapt the process for providing a composite identity marking on a substrate of a security document known from document D5, in which the first and second marking stations are located at the same side of the substrate ("front side"), such that a double-sided composite identity marking is provided, cf paragraph [0007] of the patent in suit.

3.3 The documents cited by the appellant do not give a clear hint or suggestion to the person skilled in the art to provide the second identity marking of a composite identity marking only on the back side of a security document by using a laser beam through the front side and across said document.

Document D5 does not disclose or suggest that the first and second identity markings may be provided on different sides of the security papers.

Document D7 relates to a security document with security indicia being formed of at least partly transparent windows formed through the security documents and being detectable in transmitted light, see column 1, lines 55 to 59.

In its preferred embodiment, the security document comprises an at least partially transparent substrate having first and second opposing faces, and one or more opaque layers applied to at least one of the faces. The windows may be comprised of apertures formed through one or more of the opaque layers, see column 2, lines 36 to 41. In the embodiment shown in figures 1 and 4,
the apertures or openings 8 and 9 are formed through two opacifying ink layers 5 and 6, corresponding with the back side and the front side of the substrate, respectively. The laser source 10 is located at the side of ink layer 6. A first identity marking ("opening 9") is formed by ablating particles of ink layer 6. The laser beam then travels through the transparent substrate until it impinges on ink layer 5 on the back side of the substrate, where the second identity marking ("opening 8") is formed by ablating particles of layer 5. Both identity markings are made by the same marking station and are identical when viewed from the same side, and hence do not represent the markings of a **composite** identity marking as defined in paragraph [0002] and in claim 1 of the patent in suit, which is provided by two marking stations. This holds true also for the alternative embodiment with only one identity marking in a single opaque layer (cf column 2, lines 38 and 39), hence not representing a **composite** identity marking.

In the absence of any disclosed advantages or disadvantages of this embodiment, the board is not convinced that this disclosure would have prompted the skilled person to provide features (i) and (ii) in the process known from document D5.

Document D1 discloses a multilayer data carrier in the form of an identity card, and a process for making same, bearing general printed data, having at least one opaque layer and at least one transparent layer containing additives which are absorbent for a laser beam, whereby information is incorporated in the transparent layer by means of a laser beam in the form
of local changes in the optical properties of the layer, see page 1, lines 4 to 12. This document does not concern a process for providing a composite identity marking on the substrate of a security document and it does not disclose that first and second identity markings are provided on a first and second side of the substrate, respectively.

The same holds true for document D4, which discloses a label that can be inscribed using a laser beam, see figure 3, and page 7, line 27, to page 8, line 10. The laser absorbing layer (metallic layer 321) is sandwiched between the transparent protective film 31 and the contrast-forming layer 322. The laser inscription data is thus not provided on the substrate of the label formed by the layers 31, 321 and 322.

Document D6 relates to a series of data carriers, such as security documents, each having an individualized optically variable element, see column 1, lines 1 to 7, and column 5, lines 15 to 48. In the last production stage the finished hologram is transferred from the transfer belt to the final product, see column 9, lines 7 to 9. The final product can be a security document with an individualized hologram. The transfer belt consists of at least one carrier layer and a multilayered embossed layer, as shown in figure 3. In column 19, line 1 to column 20, line 56, an individualization measure on the finished transfer belt is described, which involves laser marking. The laser inscription data is not provided on the substrate of the transfer belt or hologram, and not on the substrate of the final product.
Hence, although documents D1, D4, D6 and D7 show that it was known in the art to direct a laser beam onto a layer of absorbing material through a transparent layer, none of these documents addresses the objective technical problem mentioned above and suggests clearly to the person skilled in the art to form the second identity marking of a composite identity marking through the substrate only on the back side thereof, and not on its front side as in document D5.

The board concludes that the subject-matter of claim 1 was not obvious to the person skilled in the art having regard to the cited state of the art and therefore involves an inventive step as required by Article 56 EPC 1973.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: D. Meyfarth
The Chairman: M. Poock