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**Datasheet for the decision
of 18 September 2020**

Case Number: T 1564/16 - 3.2.05

Application Number: 07814639.6

Publication Number: 2079584

IPC: B41M5/24, B42D15/10, G06K19/02

Language of the proceedings: EN

Title of invention:
Laser Marking of Pigment Layers on Documents

Patent Proprietor:
L-1 Secure Credentialing, Inc.

Opponent:
Giesecke & Devrient GmbH

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Added matter (yes)

Decisions cited:
G 0004/88



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Case Number: T 1564/16 - 3.2.05

D E C I S I O N
of Technical Board of Appeal 3.2.05
of 18 September 2020

Appellant: Giesecke & Devrient GmbH
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Respondent: L-1 Secure Credentialing, Inc.
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Representative: Fish & Richardson P.C.
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
22 April 2016 concerning maintenance of the
European Patent No. 2079584 in amended form.**

Composition of the Board:

Chairman P. Lanz
Members: O. Randl
T. Karamanli

Summary of Facts and Submissions

I. The opponent appealed against the decision of the opposition to maintain European patent No. 2 079 584 ("the patent") in amended form.

II. The following requests were filed in the course of the written appeal proceedings.

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

By letter dated 8 August 2017 and received on 9 August 2017, the appellant also requested the transfer of its opponent status to the company Giesecke + Devrient Mobile Security GmbH.

The respondent requested that the appeal be dismissed.

III. By communication dated 5 March 2018, the board informed the parties that in the board's preliminary opinion, the evidence on file in support of the appellant's request for transfer of its opponent status was insufficient.

IV. On 18 November 2019, the board issued a summons to oral proceedings. In a communication dated 6 May 2020 pursuant to Article 15(1) RPBA of the Rules of Procedure of the Boards of Appeal which entered into force on 1 January 2020 (RPBA 2020; OJ EPO 2019, A63), the board gave its provisional opinion.

V. The oral proceedings before the board were held on 18 September 2020 in the absence of the duly summoned parties, who had informed the board by letters

dated 24 August 2020 and 9 September 2020, respectively, that they would not be attending the oral proceedings.

VI. Claim 1 of the main request which the opposition division found to comply with the requirements of the EPC reads as follows (the feature references used by the board are given in square brackets):

"[1] A laser markable document comprising:
[2] a binder sensitive to laser energy;
[3] a pigment interspersed in the binder;
[4] a document substrate (104), the binder applied to the document substrate, wherein [5] the pigment comprises particles that have a structure causing the particles to align substantially along an orientation such that viewing information printed with this pigment shifts when viewed at different viewing angles;
wherein [6] the binder comprises a polymer that carbonizes in response to laser engraving; and
wherein [7] the pigment comprises particles having an oblong shape;
and wherein [8] the pigment comprises an optically variable pigment."

VII. The arguments of the parties presented in writing on the aspects of the case decisive for the decision may be summarised as follows.

(a) Claim interpretation

(i) Appellant (opponent)

Interrelation of features 5, 7 and 8

Feature 5 defines that the pigment comprises particles that have a structure causing the particles to align. Feature 7 defines that the pigment comprises particles having an oblong shape. These features are not tied to each other. Thus, the respective particles are not necessarily the same. For instance, the particles having a structure causing the particles to align may consist of spherical particles having one hemisphere metallised so that the particles may be aligned in a magnetic field, whereas the particles having an oblong shape may have a completely different structure (and shape) with no effect whatsoever to align substantially along an orientation. Feature 8 further defines that the pigment comprises an optically variable pigment. Thus, the pigment interspersed in the binder may comprise three different components, namely, particles having a structure causing the particles to align (feature 5), particles having an oblong shape (feature 7) and an optically variable pigment. These components are not necessarily the same.

(ii) Respondent (patent proprietor)

The respondent has not commented on the appellant's interpretative arguments set out above.

(b) Added subject-matter

(i) Appellant (opponent)

Objection 1

How the features of original claim 7 were incorporated into claim 1 infringes Article 123(2) EPC. According to original claim 7, it is the optically variable pigment which comprises those particles having a structure to cause the particles to align. These two functions are strictly connected to one another according to original claim 7, whereas they have been separated in claim 1. That is, claim 1 defines [first] particles in feature 5 having a structure to cause the particles to align and [second] pigments in feature 8 which comprise an optically variable pigment. Contrary to original claim 7, these components are not necessarily the same in claim 1.

There is also no support for this amendment in the specification. The sole passage which relates to the alignment of particles can be found in paragraph [20] of the WO-publication where it is stated:

"The pigment is chosen to have desired optical properties, including a colour shifting effect. In one category of embodiments, the pigment is comprised of particles that have an oblong shape, causing them to align in a substantially common orientation. In one particular embodiment in this class, the pigment comprises silicate particles that have a pearlescent quality. **These** particles provide an optically variable effect achieved when viewed at different viewing angles ... " (emphases added).

For this reason alone, claim 1 as amended infringes Article 123(2) EPC. That is, features 5 and 8 stemming from original claim 7 should not have been separated in claim 1.

Objection 2

Feature 7 defines that "the pigment comprises particles having an oblong shape". This wording is based on the passage in paragraph [20] of the WO-publication as cited above. However, the relevant passage reads:

" ... the pigment is comprised of particles that have an oblong shape, causing them to align in a substantially common orientation." (Emphasis added.)

There is a clear distinction between "comprising" and "being comprised of". When a pigment is comprised of particles having a certain shape, there are no particles of a different shape present in the pigment. However, the term "comprises" as used in claim 1 is broader in the sense that the pigment may further comprise particles other than those having an oblong shape. This difference is not negligible because the particles of oblong shape are described to "cause [the particles) to align in a substantial common orientation". In other words, if there are only a few particles present with an oblong shape, the desired function may not be achieved. It rather seems from the disclosure of the patent that the particles of oblong shape need to be many so as to mutually support each other to align in the substantially common orientation.

Objection 3

Claim 1 lacks a connection between the oblong shape and the alignment. The particles defined in feature 5 which have a structure causing the particles to align and the particles defined in feature 7 having an oblong shape are not necessarily the same according to the language of claim 1. This may result in a pigment having two different kinds of particles, one having a structure causing the particles to align and a different kind of particles having an oblong shape but no specific function. This contravenes Article 123(2) EPC because it is stated in paragraph [20] of the WO-publication that it is the particles having an oblong shape which cause the particles to align in a substantially common orientation and not any other particles. There is no support in the specification that particles other than those having an oblong shape may cause the particles to align substantially along an orientation.

Objection 4

Whenever a feature from the specification is taken up in the claims to further define the features of the claimed subject-matter, the combination of features has to be supported by the original disclosure. The features of original claim 7 find their correspondence in paragraph [20] of the WO-publication. Here, the features of original claim 7 stand in context with other features, including feature 7 according to which the pigment comprises particles having an oblong shape causing them to align and feature 8 according to which these particles provide an optically variable effect achieved when viewed at different viewing angles. The passage reads:

"The pigment is chosen to have desired optical properties, including a colour shifting effect. In one category of embodiments, the pigment is comprised of particles that have an oblong shape, causing them to align in a substantially common orientation. In one particular embodiment in this class, the pigment comprises silicate particles that have a pearlescent quality. These particles provide an optically variable effect achieved when viewed at different viewing angles ... ". (Emphasis added.)

All these features stand in a specific context and, therefore, the **features of claim 7 should have been limited based on this passage, rather than splitting the features** of claim 7 and adding these features of this passage in claim 1 separately.

From the passage in paragraph [20] of the WO-publication, it becomes clear that the pigments comprising an optically variable pigment (feature 8) are identical to the particles having an oblong shape and, furthermore, that these particles cause the particles to align in a substantially common orientation. Contrary to this, these three different characteristics (optically variable, oblong shape and causing to align) are spread over different pigments/particles in claim 1. This is contrary to Article 123(2) EPC.

Objection 5

Also, paragraph [20] of the WO-publication as cited above specifically refers to "one particular embodiment" in which the pigment comprises silicate particles that have a pearlescent quality. This is the

middle sentence of the relevant passage. The next sentence states that these particles provide an optically variable effect achieved when viewed at different viewing angles. The silicate particles having a pearlescent quality are the particles providing the optically variable effect as recited in originally dependent claim 7. In other words, to comply with Article 123(2) EPC, claim 1 should define that the very specific pigment being comprised of particles having an oblong shape comprises silicate particles that have a pearlescent quality.

(ii) Respondent (patent proprietor)

The respondent has not responded to the appellant's objections under Article 123(2) EPC raised in the appellant's written submissions dated 13 March 2017 and 13 July 2020.

Reasons for the Decision

1. The duly summoned parties did not attend the oral proceedings, as communicated to the board in writing beforehand. In accordance with Rule 115(2) EPC and Article 15(3) RPBA 2020 the oral proceedings were held in their absence.
2. Request for transfer of the opponent status
 - 2.1 With a letter dated 8 August 2017 the representative of the appellant Giesecke & Devrient GmbH requested the transfer of its party status as opponent to Giesecke + Devrient Mobile Security GmbH.

2.2 By communication dated 5 March 2018, the board informed the parties that in the board's preliminary opinion, the evidence on file in support of the appellant's request for transfer of its opponent status was insufficient in view of the requirements established by the Enlarged Board of Appeal in decision G 4/88 (OJ EPO 1989, 480). In particular, there was no indication of a transfer of assets that could be said to be those in whose interest the opposition had been filed in the first place. Therefore, the appellant's request was to be rejected and the case was to proceed with the original opponent, namely Giesecke & Devrient GmbH.

2.3 Since the appellant has filed no further evidence or arguments in reaction to the board's communication, the board sees no reason to deviate from this preliminary opinion.

Consequently, the request for transfer of the opponent status is rejected .

3. Claim interpretation: interrelation of features 5, 7 and 8

Features 5, 7 and 8 all refer to objects that "the pigment", i.e. the pigment interspersed in the binder according to feature 3, comprises: according to feature 5, the pigment comprises particles of a certain structure, whereas features 7 and 8 require the pigment to comprise particles of a certain shape and an optically variable pigment, respectively.

The language of claim 1, which repeatedly uses the inclusive term "comprises", is such that the particles of features 5 and 7 and the pigment of feature 8 do not have to be the same.

For instance, a pigment comprising both:

- (i) (not oblong) particles having a structure according to feature 5; and
- (ii) distinct, oblong, particles

would satisfy the requirements of features 5 and 7. If one (or both) of these two groups of particles were optically variable pigments or if the pigment contained such pigments in addition to the two groups of particles, the pigment would also satisfy the requirement of feature 8.

4. Added subject-matter (Article 123(2) EPC)

Claim 1 underwent several changes in the course of the examination and opposition proceedings. Its features essentially comprise the features of original claims 1 (features 1 to 4), 2 (feature 6) and 7 (features 5 and 8). Feature 7 has no counterpart in the original claims. It was incorporated during the examination proceedings. As explained in the applicant's (now the respondent's) letter dated 22 August 2013, the feature is based on page 6, lines 25 to 27, of the original application (corresponding to paragraph [20] of the WO-publication), according to which:

"... In one category of embodiments, the pigment is comprised of particles that have an oblong shape, causing them to align in a substantially common orientation. ..."

In the decision under appeal (see point 2.1.1), the opposition division briefly dealt with the opponent's objection that claim 1 did not comply with the requirements of Article 123(2) EPC. The opposition division made the following statement:

"Claim 1 according to the main request is a combination of claims 1,2 and 7 as originally filed with page 6 lines 25-27 of the application as originally filed (published as W02008/028158A2). The requirements of Art. 123(2) EPC are thus met."

The following table allows comparing claim 1 and the different parts of the original application that allegedly provide a basis for the claim:

	Claim 1	Original application
[1]	A laser markable document comprising:	[claim 1] A laser markable document material comprising ...
[2]	a binder sensitive to laser energy	[claim 1] ... a binder sensitive to laser energy ...
[3]	a pigment interspersed in the binder	[claim 1] ... a pigment interspersed in the binder ...
[4]	a document substrate (104), the binder applied to the document substrate	[claim 1] ... a document substrate, the binder applied to the document substrate.

[5]	wherein the pigment comprises particles that have a structure causing the particles to align substantially along an orientation such that viewing information printed with this pigment shifts when viewed at different viewing angles	[claim 7] ... wherein the pigment comprises particles that have a structure causing the particles to align substantially along an orientation such that viewing information printed with this pigment shifts when viewed at different viewing angles.
[6]	wherein the binder comprises a polymer that carbonizes in response to laser engraving	[claim 2] The material of claim 1 wherein the binder comprise [sic] a polymer that carbonizes in response to laser engraving.
[7]	and wherein the pigment comprises particles having an oblong shape	[page 6, lines 25 to 27] ... In one category of embodiments, the pigment is comprised of particles that have an oblong shape, causing them to align in a substantially common orientation. ...
[8]	and wherein the pigment comprises an optically variable pigment	[claim 7] The material of claim 2 wherein the pigment comprises an optically variable pigment ...

The table shows that all the features of claim 1 are taken almost verbatim from original claims 1, 2 and 7 and a sentence on page 6, lines 25-27, of the original description. However, the oblong particle shape of feature 7, which is only found on page 6 of the description, is disclosed in a particular context.

In this context, it is said that the oblong shape causes the particles to align in a substantially common orientation. Thus, feature 7 is disclosed as a particular case of feature 5.

Claim 1 has been drafted in such a way that features 5 and 7 are independent of each other: there is no requirement that the particles of feature 5 and the particles of feature 7 have to be the same. Thus, claim 1 also encompasses the case where the pigment comprises both particles that have a structure causing the particles to align substantially along an orientation and (distinct) particles having an oblong shape. This situation is not disclosed anywhere in the original application. This means that claim 1 has been amended in such a way that it contains subject-matter which extends beyond the content of the application as filed.

Therefore, claim 1 contravenes Article 123(2) EPC.

In view of this, it is not necessary to examine whether there are further violations of Article 123(2) EPC, as alleged by the appellant.

5. Conclusion

As set out above (see point 4.), the patent as amended according to the main request forming the basis for the decision under appeal violates the provisions of Article 123(2) EPC and does therefore not meet the requirements of the EPC. Consequently, the patent has to be revoked pursuant to Article 101(3) (b) EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



H. Jenney

P. Lanz

Decision electronically authenticated