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File Number: T 110/91 - 3.3.1

Application No.: 85 302 769.6

Publication No.: 0 160 469

Title of invention: Light-sensitive silver halide multi-layer color  
photographic material

Classification: G03C 7/26

D E C I S I O N  
of 24 April 1992

Proprietor of the patent: KONICA CORPORATION

Opponent: Agfa-Gevaert AG, Leverkusen

Headword:

EPC Articles 54, 114(2) and 104(1); Rule 63(1) EPC

Keyword: "Late-filed documents admitted as relevant" - "Reasons for late-  
filing insufficient: apportionment by Opposition Division ordered"

Headnote



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Boards of Appeal

Chambres de recours

Case Number : T 110/91 - 3.3.1

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.1  
of 24 April 1992

**Appellant :**  
(Opponent)

Agfa-Gevaert AG, Leverkusen  
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**Respondent :**  
(Proprietor of the patent)

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**Representative :**

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**Decision under appeal :**

Interlocutory decision of the Opposition Division  
of the European Patent Office dated  
19 December 1990 concerning maintenance of  
European patent No. 0 160 469 in amended form.

**Composition of the Board :**

**Chairman :** K. Jahn  
**Members :** F. Bauriedel  
J.A. Stephens-Ofner

**Summary of Facts and Submissions**

I. European patent No. 0 160 469 was granted on 2 November 1988 on the basis of ten claims in response to European patent application No. 85 302 769.6.

II. Notice of opposition was filed by the Appellant on 13 February 1989 requesting revocation of the patent in its entirety on the grounds of lack of novelty and inventive step. The Opposition was supported by the following documents:

- (1) EP-A-0 099 234, and
- (2) US-A-4 334 011.

On 27 April 1990 the Patentee filed new Claims 1 to 9, amendments to the description and new comparative test results.

Claim 1 of this set of claims reads as follows:

"1. A light-sensitive silver halide multi-layer color photographic paper material having a light-sensitive silver halide emulsion layer on a support wherein a light-sensitive silver halide emulsion layer which is positioned farthest from the support contains mono-dispersed silver halide grains and a non-diffusion coupler and is red-light sensitive, characterized in that said silver halide grains comprise primarily (100) faces, have an average grain size of 0,2 to 0,8  $\mu\text{m}$  and have a value of the standard deviation S of the distribution of grain sizes divided by the average grain size r of 0.20 or less and said silver halide is silver chloride or silver bromide."

In comparison with the granted version, this claim contains the following additional features:

- (1) The claimed multi-layer colour photographic material is a photographic paper;
- (2) the light-sensitive layer positioned furthest from the support is sensitive to red light;
- (3) the monodispersed silver halide grains may not possess a variation coefficient greater than that stated;
- (4) the monodispersed silver halide is silver chloride or silver bromide.

III. By an interlocutory decision dated 19 December 1990 the Opposition Division maintained the patent on the basis of the claims submitted on 27 April 1990.

The Opposition Division held that the amended claims met the requirements of Article 123(2) and (3) EPC. The subject-matter of Claim 1 was considered novel, as all the examples of document (1) - the closest state of the art - concerned films, i.e. materials having a blue sensitive layer as the outermost light-sensitive layer containing silver halide not covered by the present Claim 1. In view of the fact that the patent-in-suit on the one hand and documents (1) and (2) on the other were concerned with different problems, the prior art did not hold out any prospect that the specific features according to Claim 1 could result in an improvement as regards processing facilities of the red sensitive layer of a colour paper.

IV. Notice of Appeal, accompanied by a Statement of Grounds, was lodged by the Appellant on 8 February 1991, and the appeal fee was paid on the same day. The Appellant relied on the following fresh documents:

- (3) DE 32 02 002,
- (4) EP 80 896,
- (5) EP 95 722,
- (6) EP 95 921,
- (7) EP 016 690, under Article 54(3) EPC, and
- (8) "Die photographische Emulsion und die Verarbeitung photographischer Schichten" ("Photographic emulsion and the processing of photographic layers") in "Die Grundlagen der photographischen Prozesse mit Silverhalogeniden" ("The principles of photographic processes using silver halides"), published by H. Frieser, G. Haase and E. Klein, Akademische Verlagsgesellschaft Frankfurt am Main, 1968, page 638, last line, to page 639, line 8.

The Appellant gave the following grounds for his appeal:

The late introduction of the new documents cited had been necessitated by the fact that the Patentee had limited the subject-matter of the patent to a colour photographic paper with the special features specified in the new claims. However, even a paper corresponding to this claim was not novel but was already known from the prior art. Example 1 on page 39/40 of (3), for example, disclosed a colour photographic paper containing in the furthest layer 5 from the support a red-sensitive silver chloride/bromide emulsion with an average particle size of 0.40  $\mu\text{m}$  and a non-diffusion cyan coupler. The description further stated, on page 30, that the grain size distribution could be narrow, and the silver halide particles could comprise (100) crystal faces.

With regard to the special features of Claim 1 it was to be noted that silver halide particles with (100) faces were those that comprised the usual cubic or

tetradecahedral crystal habit and, moreover, that the term "narrow grain size distribution" was merely a synonym for a monodispersed emulsion with a variation coefficient of less than 0.20. Colour photographic papers of this type were also described in cited documents (4) to (7).

Moreover, it was impossible to distinguish such a material containing monodispersed silver halide from the known materials containing polydispersed silver halide by the fact that the silver halide grains

"... had a variation coefficient of less than 0.20 ..."

as long as the claim was concerned with an emulsion layer "containing" silver halide of that kind. Such a definition would also include emulsions which contained only a small proportion of monodispersed silver halide and were thus no longer distinguishable from polydisperse emulsions.

But even if novelty were to be admitted in view of the numerical value given to the maximum possible standard deviation, there was no inventive step. Nor had it been proved that the limit stated was of critical importance.

- V. The Respondent submitted that even the late-filed prior art cited later was not prejudicial to novelty and inventive step.

Thus, document (3) did not disclose the claimed colour paper, since on page 30 it merely said that the emulsion could be monodisperse or polydisperse. Nor could it be deduced from this that the emulsions in Example 1 were monodisperse emulsions with a coefficient of less than 0.20, as prescribed by the current claim.

A claim has to be construed in a common sense way; if, in practice, one could not establish whether or not a particular emulsion is monidispersed or polydispersed then it would not infringe the claim. However, with an emulsion which is polydisperse but which also contains monidisperse emulsion, the latter can be detected because there will be a group of grains of the same size.

Nevertheless, should these fresh citations be found relevant, the Respondent suggested that the case be remitted to the Opposition Division. In addition, he asked for costs incurred by the late introduction of documents.

In the end, the Appellant supported the Patentee's request that the case be remitted to the Opposition Division. The Appellant withdrew his original request for oral proceedings in case that the Board decided to remit the case to the Opposition Division.

#### Reasons for the Decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.
2. In the Board's view, documents (3) and (8) come very close to the colour photographic paper claimed here, in which the layers are arranged as in Claim 1 with a special red-light-sensitive outer layer containing a mono-dispersed silver halide emulsion.

Thus, the prior art has to be considered in assessing novelty and inventive step in accordance with Article 114(1) EPC.

For the assessment of novelty and inventive step the Patentee sees the most important difference from the known materials as being that the red-sensitive silver halide emulsion layer furthest from the support contains mono-dispersed silver halide for which the variation coefficient (standard deviation  $S$  of the grain size distribution divided by the average grain size  $r$ ) is 0.20 or less.

This feature would generally be understood by experts in the field to apply also to those colour photographic papers in which the outer red-sensitive layer might in addition to a mono-dispersed silver halide characterised in this way also contain greater or smaller proportions of a monodispersed or polydispersed silver halide otherwise characterised, as also shown in Claims 6 and 7.

No express instruction to use a monodispersed silver halide characterised by the stated variation coefficient in an outer red-sensitive layer of a colour paper is given in cited documents (3) to (7). However, this would not be sufficient in itself to establish novelty, unless this feature of the invention was a distinctive parameter, i.e. unless the claimed material showing this feature could be clearly identified and thus clearly distinguished from known photographic materials of a similar structure, such as the colour photographic paper disclosed in (3), in which the silver halide, according to the third paragraph of page 30, has a "narrow grain size distribution".

The Board therefore seriously doubts whether a photographic silver halide emulsion layer containing monodispersed silver halide with the grain size distribution stated in Claim 1 in variable proportions in addition to silver halide otherwise defined could, for



example by the detection of a group of grains of the same size, be clearly identified and clearly distinguished from those silver halide layers in which the silver halide had "a narrow grain size distribution".

The Board does not however consider it appropriate at this point in the proceedings to issue a decision on the question whether the claimed photographic paper could be novel as a result of other features nor on the further question of inventive step in view of cited documents (3) to (8). Since these facts were not considered by the department of first instance, a decision by the Board on these questions would deprive the parties involved of an appealable decision on this point.

Late filing of facts and evidence admitted under Article 114(2) EPC normally leads to an appointment of costs (Article 104(1) and Rule 63(1) EPC), and in the absence of strong mitigating circumstances for the late filing of facts, evidence of other matter, the late filing party should bear all the additional costs incurred by his tardiness (cf. T 326/87, loc. cit.). The reasons given by the Opponent for the late introduction of documents (3) to (8) are, in the Board's judgment, insufficient; and this fact should be taken into account by the Opposition Division when apportioning costs.

**Order**

**For these reasons, it is decided that:**

1. The decision under appeal is set aside.

2. The case is remitted to the Opposition Division for further processing on the basis of cited documents (3) to (8).

The Registrar:

The Chairman:

E. Görgmaier

K. Jahn