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File Number: T 114/90 - 3.3.1  
Application No.: 83 303 091.9  
Publication No.: 0 095 920  
Title of invention: A color photographic light-sensitive material

Classification: G03C 7/30

**D E C I S I O N**  
of 26 February 1992

Proprietor of the patent: KONICA CORPORATION  
Opponent: 01) Agfa-Gevaert AG, Leverkusen  
02) Ilford AG

Headword: Colour paper/KONICA  
EPC Article 56  
Keyword: "Inventive step (no), obvious improvement"

Headnote



Case Number : T 114/90 - 3.3.1

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.1  
of 26 February 1992

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**Decision under appeal :** Decision of Opposition Division of the European  
Patent Office delivered orally on  
7 November 1989, with written reasons posted on  
11 December 1989, revoking European patent  
No. 0 095 920 pursuant to Article 102(1) EPC.

**Composition of the Board :**

**Chairman :** K.J.A. Jahn  
**Members :** R.K. Spangenberg  
J.A. Stephens-Ofner

### Summary of Facts and Submissions

I. This appeal, which was filed on 14 February 1990 and which was accompanied by the payment of the appropriate fee, lies from the decision of the Opposition Division of the EPO delivered orally on 7 November 1989, with written reasons posted on 11 December 1989, revoking European patent No. 0 095 920 in respect of two oppositions. The patent was granted in response to European patent application No. 83 303 091.9 filed on 27 May 1983 and claiming priority of 1 and 2 June 1982 of two earlier applications in Japan. The patent specification contained 11 claims. The decision under appeal was based on an amended independent Claim 1 and dependent Claims 2 to 11 as granted. Claim 1 read as follows :

"A color photographic light-sensitive material for use in making photographic prints comprising a support having thereon a plurality of silver halide emulsion layers and a non-light-sensitive layer on the side opposite to the support side of the silver halide emulsion layer located farthest from the support, characterised in that said support is a reflective support, and that said silver halide emulsion layer located farthest from the support is a red-sensitive layer comprising a silver halide containing 15 to 70 mole % of silver chloride and said non-light-sensitive layer contains an ultraviolet absorbing agent whose spectral absorption coefficient (as herein defined)  $A_1$  at 350 nm and whose spectral absorption coefficient  $A_2$  at 400 nm are in a ratio  $A_1/A_2$  of not less than 10."

In the decision under appeal reference was made to 5 documents and the public prior use of the

KODAK Color Paper RC 78, Emulsion No. 135 905.

Among the cited documents the following remained relevant during the appeal proceedings:

- (2) DE-A-1 915 118, and
- (5) DE-A-2 163 904.

According to the Opposition Division the above KODAK color paper belonged to the state of the art pursuant to Article 54(2) EPC and was analysed before the priority date of the disputed patent. This analysis revealed a sequence of layers satisfying the requirements of the amended Claim 1 and the presence of an ultraviolet absorber in the non-light-sensitive layer farthest from the support which was identical with that used in Examples 1 and 2 of the disputed patent. A later analysis, carried out by one of the Respondents, additionally demonstrated that the red-sensitive layer contained a silver halide comprising  $17.3 \pm 2$  mole % silver chloride. Therefore, the subject-matter of Claim 1 was not novel.

They also held, in addition, that it did not involve an inventive step in view of documents (2) and (5). The only difference between the subject-matter of Claim 1 and Example 1 of document (2), representing the closest state of the art, was that in the latter the silver chloride content of the red-sensitive layer was not indicated. The selection of the range of 15 to 70 mole % silver chloride was however obvious, since the advantages of a silver chloride content within this range, stated in the disputed patent, namely a reduction of static marks during manufacture and processing of photographic papers, were obvious having regard to document (5).

II. In his Statement of Grounds of Appeal, received on 17 April 1990, the Appellant (patent proprietor) contested

that a prior public use of the KODAK color paper RC 78, emulsion No. 135 905 was sufficiently proved. In particular, he submitted that there was no evidence for the identity of the two samples analysed at different times. Therefore, novelty of the subject-matter of the disputed patent should be accepted. He further argued that document (2) did not represent the closest state of the art, since it was not concerned with the protection from static discharges but with dye stability. Document (5) related to the manufacture of films, a technical field in which some technical problems relating to the manufacture of materials for obtaining colour prints, in particular that of whiteness after processing, did not arise. It was therefore not obvious to combine the technical information of documents (2) and (5).

- III. In his reply, the Respondent I (Opponent I) confirmed that the samples of the KODAK color paper analysed in 1982 and 1988 were identical and filed further evidence relating to the alleged public prior use. In his opinion, on the basis of the additional evidence, the subject-matter of Claim 1 of the disputed patent was not novel. He also submitted that, regarding inventive step, the Appellant's arguments were unconvincing since there was no evidence that the claimed subject-matter amounted to more than a mere aggregation of elements well known in the art of manufacturing photographic materials.
- IV. Respondent II (Opponent II) substantially concurred with Respondent I's submissions.
- V. The Appellant, who has not filed any observations to the Respondents' counterstatements, requested that the decision under appeal be set aside and (by implication) the patent be maintained on the basis of the claims on

which the impugned decision was based (see paragraph I above).

The Respondents request that the appeal be dismissed.

#### Reasons for the Decision

1. The appeal is admissible.
2. The Board is satisfied that the amended Claim 1 is in accordance with the requirements of Article 123(2) and (3) EPC.
3. The requirements for establishing what was made available to the public by prior use are the subject-matter of a question of law referred to the Enlarged Board of Appeal by the President of the EPO pursuant to Article 112(1)(b) EPC dated 30 December 1991 (to be published in the OJ EPO). In particular, the question to be answered by the Enlarged Board of Appeal is whether or not the chemical composition of a product is made available to the public by virtue of the availability to the public of that product, irrespective of whether particular reasons exist to make a skilled person analyse that product. The answer to this question is important in the present case since a relevant part of the chemical analysis was in fact carried out no earlier than 1988, i.e. more than five years after the priority date of the disputed patent and it is therefore fair to infer that there was probably no reason to do this before that date. In the light of the referral of this question of law to the Enlarged Board of Appeal, the Board deems it inappropriate to take a decision on the issue of novelty in the present case.

4. However, it is possible to decide the appeal on other grounds.

4.1 The patent in suit relates to the reduction of static markings in photographic materials for use in making colour prints (page 2, lines 5 to 15). According to the patent, this problem was previously solved by applying an ultraviolet absorber in the top (non-light-sensitive) layer of the photographic material. However, the previously used UV-absorbers were yellow-coloured and therefore impaired the whiteness of the finished prints (page 2, lines 18 to 24).

4.2 In accordance with the statements in the patent specification (page 2, lines 25 to 29) the technical problem which the subject-matter of the disputed patent sets out to solve can therefore be seen in reducing the occurrence of static marks while maintaining good whiteness of the finished print.

4.3 The patent proposes to solve this problem essentially by combining in a material having a reflective support (i.e. being a colour paper and not a film) a UV absorber whose spectral absorption coefficient (as defined in the patent specification, page 3, lines 33 to 43)  $A_1$  at 350 nm and whose spectral absorption coefficient  $A_2$  at 400 nm are in a ratio  $A_1/A_2$  of not less than 10, being present in the said top layer, with a silver halide emulsion layer located farthest from the support being a red-sensitive layer comprising a silver halide containing 15 to 70 mole % of silver chloride.

4.4 Having regard to the test results contained in Tables 2 and 4 on pages 13 and 14 of the patent specification the Board is satisfied that the existing technical problem has thereby been effectively solved.

4.5 However, one part of the above technical problem was also addressed in document (5), which relates to the manufacturing of photographic films which are free of static markings (see page 5, paragraph 3). One of several alternative solutions to this problem proposed in that document is to incorporate into the top (non-light-sensitive) layer of the film a UV absorber which, according to Claim 3, may be 2-(2'-hydroxyphenyl-5'-tert.butyl-phenyl)-benzotriazole (i.e. the compound mentioned in the patent in suit, page 4 as compound UV-3). According to Claim 2 and page 6, third paragraph to page 7, second complete paragraph of document (5) it is further preferred that the silver halide is AgClBr containing between 2 and 85 mole % bromide, i.e. from 15 to 98 % chloride.

4.6 In the Board's judgment, a person skilled in the art faced with the same problem of reducing static markings in the field of manufacturing colour papers (i.e. materials having a reflective support) would be aware of the solutions proposed for solving essentially the same problem in the related technical field of manufacturing photographic films. It is true that the second part of the existing technical problem, i.e. the maintenance of good whiteness, which implies that the UV absorber should not absorb visible light, may not be as important in relation to films as it is in relation to colour papers. Nevertheless, document (2), relating to the stabilisation of the dye images formed during processing of photographic papers as well as films (see Claims 2 and 3) states on page 2 (second paragraph) that a UV absorber suitable for this purpose must have several properties, and in the first place that it must absorb UV light having frequencies between 300 and 400 nm but should not absorb visible light having frequencies greater than 420 nm. The



document specifically recommends the use of a class of benzotriazoles substantially identical with that of Claim 5 of the disputed patent. An example for a photographic paper is given in Example 1 (pages 12 and 13), where a paper coated with baryte, hence a reflective support, was provided subsequently with a blue-sensitive, a green-sensitive and a red-sensitive silver halide layer, the latter containing AgClBr of unspecified chloride content, and finally a non-light-sensitive layer containing three benzotriazole UV absorbers which correspond to the compounds UV-3, UV-4 and UV-5 mentioned on page 4 of the disputed patent.

- 4.7 In the Board's judgment, it is clear from Example 1 of document (2) that a colour paper having the sequence of layers indicated in Claim 1 of the patent in suit belonged to the state of the art which the patent sets out to improve. Thus the solution to the existing problem proposed by the disputed patent did not require more than the application of the preferred solution to the similar problem of reducing static marking, disclosed in document (5) with respect to the manufacturing of films, to the manufacturing of a photographic paper of the type disclosed in Example 1 of document (2). The Board cannot agree with the Appellant's submission that the person skilled in the art would not have applied this known solution because there was danger to impair the whiteness of the finished paper, since it was clearly derivable from document (2), page 2 and Claim 1 that the benzotriazole compounds mentioned there would not absorb visible light. No inventive skill was therefore necessary in order to find the solution to the existing problem proposed by the disputed patent.

5. Therefore, the requirements of Article 100(a) EPC are not met. The dependent Claims 2 to 11 fall together with Claim 1.

Order

For these reasons, it is decided that:


The appeal is dismissed.

The Registrar:



E. Görgmaier

The Chairman:



K. Jahn