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BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

A B X C

File Number:

T 229/90 - 3.3.1

Application No.:

82 302 192.8

Publication No.:

0 063 962

Title of invention:

Silver halide photographic material

Classification:

G03C 1/02

D E C I S I O N of 28 October 1992

Proprietor of the patent:

KONICA CORPORATION

Opponent:

CIBA-GEIGY AG Patentabteilung

Headword:

Monodisperse emulsions/KONICA

EPC

Article 54

Keyword:

"Novelty" (confirmed) - A cited document must be interpreted in the light of common general knowledge available at its publication date. Common general knowledge which did not exist at this date but which only became available at a later date, cannot be used to interpret such a document.

interpret such a document.



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Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 229/90 - 3.3.1

D E C I S I O N
of the Technical Board of Appeal 3.3.1
of 28 October 1992

Appellant:

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Decision under appeal:

Decision of the Opposition Division of the European Patent Office of 5 December 1989 with written reasons posted on 23 January 1990

revoking European patent No. 0 063 962 pursuant

to Article 102(1) EPC.

Composition of the Board:

Chairman:

K. Jahn

Members :

F. Bauriedel

J.A. Stephens-Ofner

## Summary of Facts and Submissions

- I. European patent No. 0 063 962 was granted on 7 January 1987 on the basis of ten claims in response to European patent application No. 82 302 192.8 filed on 28 April 1982. Claim 1 read as follows:
  - "1. A silver halide photographic material comprising a base having formed thereon one or more silver halide emulsion layers made from two or more emulsions having average grain sizes which are from 0.2 to 3.0  $\mu$ m and which are different in the different emulsions, wherein the grain size distribution curve of the silver halide grains in said emulsion layer or layers has two or more peaks, the distance between the highest peak and the second highest peak corresponding to at least 0.3  $\mu$ m characterised in that the emulsions in said layer or layers are each monodispersed."
- II. Notice of opposition was duly filed requesting the revocation of the patent on the ground that its subjectmatter did not involve an inventive step. In the course of the opposition proceedings the following documents were cited:
  - (1) JP-A-51-115 201 (53-44 016), pages 1 to 6, in the
    form of a translation into English comprising
    22 pages;
  - (2) V.L. Zelikman, S.M. Levi, "Making and Coating Photographic Emulsions", The Focal Press, 1964, pages 234 to 237;
  - (3) J.C. Dainty, R. Shaw, "Image Science", Academic Press, 1974, pages 99 to 100;
  - (4) G.C. Farnell, J. Phot, Sci. <u>17</u>, 1969, page 122, drawing No. 7; and
    - (5) US-A-3 923 515.

III. By a decision of 5 December 1989 with written reasons posted on 23 January 1990 the Opposition Division revoked the patent. The decision was based on Claim 1 of the main request and on Claim 1 of the auxiliary request, both claims filed in the course of the oral proceedings.

Claim 1 of the main request reads as follows:

"A silver halide X-ray photographic material comprising a base having formed thereon one or more silver halide emulsion layers made from two or more emulsions having average grain sizes which are from 0.2 to 3.0  $\mu$ m and which are different in the different emulsions, wherein the grain size distribution curve of the silver halide grains in said emulsion layer or layers has two or more peaks, the distance between the highest peak and the second highest peak corresponding to at least 0.3  $\mu$ m and the emulsion in said layer or layers are each monodispersed."

Claim 1 of the auxiliary request contains, in addition to the features set out above, the qualification "that the quotient of the standard deviation in the grain size divided by the average grain size being 0.16 or less".

The decision under appeal was entirely based on document (5) despite the fact that invalidity was pleaded and supported on the basis of documents (1) and (2) as well. This document discloses a silver halide X-ray photographic material comprising a base having formed thereon silver halide emulsion layers made from two different emulsions with average grain sizes within the claimed range.

The Opposition Division considered that the grain size distribution curve of the emulsions of Example 1 in this document must have two peaks, one between 0.7 and

0.8 micron and one between 1.4 and 1.5 micron, resulting in a distance between the highest and the second highest peak more than 0.3 micron and that the emulsions each are monodispersed.

In the decision under appeal it was held that Claim 1 of the main request and of the auxiliary request was anticipated by Example 1 of document (5) on the basis of a simple calculation.

IV. Notice of appeal was lodged against this decision on 23 March 1990 with payment of the prescribed fee. A Statement of Grounds of Appeal was filed on 5 June 1990. In it, as well as in the course of the oral proceedings held on 28 October 1992, the Appellant disputed that document (5) disclosed a photographic material having thereon one or more layers produced from one or more monodispersed emulsions.

The passages in Example 1 of document (5), "... The first emulsion comprising silver iodobromide grains of about 0.7 to 0.8  $\mu$  ..." and "... The second emulsion comprising silver bromoiodide grains of about 1.4 to 1.5  $\mu$  ..." were not intended to be an indication of the difference between the size of the smallest and largest grains. This interpretation was supported by an affidavit of Dr Tadeo Sugimotu, in which he stated that it would not have been possible to make emulsions with such a narrow grain size distribution range at the time (5) was filed in 1974. Such emulsions were first prepared in 1979, and only on the basis of pure silver bromide, as was shown in an article by J.D. Lewis in

:(7) "The Journal of Photographic Science 27" (1979),
 pages 25 to 30.

In fact the grain sizes specified in Example 1 referred to the average grain diameter, which in itself was no basis for concluding that the grain size distribution was either broad or narrow.

In addition, document 8,

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(8) Technical Photographic Handbook, 1973, Corona Publishing Co. Ltd., page 217, Figure 3.7(b) and Table 3.3,

showed that the routine method for preparing X-ray photographic material was to utilise polydispersed rather than monodispersed silver halide emulsions.

There was therefore absolutely no basis for concluding that monodispersed emulsions were disclosed in (5).

The Board, of its own motion (Article 114(1) EPC), refocussed attention on documents (1) and (2), and to their relevance both to novelty and to obviousness. In response, the patentee submitted that either/both these grounds as based on documents (1) and (2) amounted to a case sufficiently different from the one actually decided by the Opposition Division to warrant a remittal under Article 111(1) EPC. In reply to the Board's observation that the age of the patent in suit (ten years), rendered it highly desirable in the public interest that the appeal proceedings be swiftly concluded, thereby bringing commercial uncertainty in the minds of the patentee as well as of potential users of the invention to an end, the patentee urged the Board to resolve any doubts it might have on the fresh case, as raised by documents (1) and (2), in the patentee's favour, leaving it to the national courts to decide, if called upon to do so, the validity of

the patent on this and perhaps other grounds as yet not before the Board of Appeal.

In addition, the patentee strongly objected to the admission into the appeal case of fresh evidence relating to document (6), on the ground that he was unable to check its accuracy in the time available during the oral proceedings.

In view of the apparent relevance of this evidence, the Board decided to admit it into the case.

V. The Respondent submitted that the Appellants' arguments were false.

The Respondent and the emulsion experts of Agfa-Gevaert AG both argued that in view of the lack of other statements or additional information the grain sizes specified in Example 1 of (5) were to be understood literally. This meant that the size of the silver halide grains of the two emulsions had each to lie within a narrow range, a feature that was characteristic of monodispersed emulsions. This example also taught the minimum distance between the two peaks to which the patent in suit had to adhere.

The Respondent conceded that it was unusual to use monodispersed silver halide emulsions in the preparation of X-ray materials. Nor were they aware of any publication which showed that the use of the monodispersed emulsions as defined in the claim in X-ray materials, was already known at the time (5) was published in December 1975. However, this had no bearing on the interpretation of Example 1 of (5), namely whether it disclosed monodisperse silver halide emulsions. It was sufficient for a person skilled in the art to know that the preparation of

monodispersed silver halide emulsions had been known since 1972. This could be inferred from

(6) US-A-4 177 071,

considering that column 5, lines 52 to 54, referred to a document in which the preparation of such emulsions was described. A person skilled in the art did not, therefore, require any particular reference to be made to the preparation of such monodispersed emulsions in (5).

Nor did the definition of the grain size distribution added to Claim 1 introduce a new element so as to render the claimed subject-matter novel.

Furthermore, Example 4 of (5) anticipated the utilisation of monodispersed emulsions, because it described an emulsion comprising cubic silver halide crystals having a silver bromide content of 30%. Such emulsions were generally only obtained by the kind of precipitation techniques used in the preparation of monodispersed silver halide emulsions.

In addition, the Respondent still maintained that the claimed materials were obvious from the documents (1) to (4) cited in support of the opposition and relied on their previous written submissions.

Having regard to the fact that the Opposition Division had already considered the question of inventive step the Respondent submitted that there was no reason to remit the matter.

The Appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be

maintained on the basis of Claims 1 to 9 filed on 28 September 1992 (main request) or on the basis of Claim 1, the subject of the auxiliary request in the opposition proceedings.

Claim 1 of the main request is in substance identical with that of the auxiliary request before the first instance (see III), with the exception that the limitation of an "X-ray" photographic material was deleted.

The Respondent (Opponent) requested that the appeal be dismissed. At the conclusion of the oral proceedings the Board announced its decision to remit the case to the Opposition Division for further prosecution.

## Reasons for the Decision

1. The appeal is admissible.

## 2. Procedural matters

The Board's jurisprudence concerning the late submittal by the parties of facts, evidence and other matter of such a relevant character as to amount to the raising of a case different from the one decided by the first instance is quite clear, see T 97/90 to be published as well as the cases referred to in that decision e.g. T 26/88, OJ EPO 1991, 030; T 326/87, OJ EPO 1991, 09 and T 611/90 (to be published). Thus, if new matter brought into the proceedings raises a case that is not identical or closely similar to the one on which the first instance's decision has been rendered, then any judicial decision by the Boards of such a case (assuming the matter to have admitted into the proceedings), cannot by definition take place by way of appeal since as was stated in paragraph 12

of the Reasons of T 26/88 quoted above, "... the essential function of an appeal is to consider whether a decision which has been issued by a first instance department is correct on its merits ... it is not normally the function of a Board of Appeal ... to examine and decide upon issues in the case which have been raised for the first time during appeal proceedings". Looked upon another way, appeal proceedings are not and have never been meant to be a mere continuation of first instance proceedings by other means.

The same holds true irrespective of whether or not a fresh case is raised on appeal either by the parties themselves, or by the Board (Article 114(1) EPC): if that case cannot properly be regarded as a mere amplification of the case decided by the first instance, remittal should normally follow, especially if fairness to the parties and the public so demands (T 611/90).

Whilst in some commercial situations and negotiations, e.g. for exclusive licences, both parties' interests may militate against an early and final resolution of the question of validity of the patent in suit, continuing commercial uncertainty cannot be in the general public interest. For this reason, the Board must always balance this general public interest against the fundamental legal requirement that it should act only within its appellate role, as provided for by the EPC, and not to step into the shoes of the first instance.

In the present case, the Board cannot accept the Opponent's submission, made in the course of oral proceedings, that the case raised under the heading of novelty and/or of obviousness having regard to documents (1) and (2), is merely but an amplification of the one

decided by the first instance on the ground of novelty alone, and having regard to document (5) only.

In the Board's view, the Opposition Division should have dealt with all objections that had been pleaded and adequately supported in the notice of opposition, and not have selected the one that seemed to be the easiest one to decide, leaving all other objections and arguments unconsidered and therefore incapable of subsequent judicial decision by way of appeal.

Nor can the Board accept the submission made by the Patentee, namely, that the fresh case, particularly on obviousness, should in any event be decided in its favour, leaving its final resolution to the national courts. Such a course of action would clearly be contrary to the overriding obligation of the European Patent Office, including the Boards of Appeal not to allow the grant of patents which do not meet the relevant requirements of the EPC.

## 3. Main request

Claim 1 of this request differs from the one as granted by the additional feature that the quotient of the standard deviation in the grain size divided by the average grain size is 0.16 or less.

This feature is disclosed in Claim 9 as filed and granted.

Claims 2 to 9 are identical to Claims 2 to 8 and 10 as originally filed and contained in the patent specification.

Therefore, there are no objections to the present claims under Article 123 EPC.

4. The only technical issue to be dealt with in these proceedings is whether document (5) anticipates Claim 1 of the disputed patent.

In its decision the Opposition Division assumed that the grain sizes specified in Example 1 of (5) ("... The first emulsion comprising silver iodobromide grains of about 0.7 to 0.8  $\mu$  ..." and "... The second emulsion comprising silver bromoiodide grains of about 1.4 to 1.5  $\mu$ ...") each define the size of the smallest and the largest silver halide grains and concluded that the grain size distribution is narrow, typical of monodispersed emulsions. However, at no point did document (5) specifically state that the grain sizes specified in Example 1 are to be understood in this way.

In the Board's judgment a person skilled in the art would not interpret the emulsions specified in Example 1 of (5) to be monodispersed emulsions of the kind described in the contested patent, because no reference to the procedural steps usually used to characterise and to prepare monodispersed emulsions can be found anywhere in (5).

Monodispersed emulsions of the kind described in the patent have a narrow grain size distribution specifically defined in the middle of page 3 of the patent specification (and in the valid Claim 1 now added to the main request) or as specified in other cited documents, e.g. in (6) column 5, line 67 to column 6, line 8, or in (1) bottom of page 6 to top of page 7, which refer to a percentage of silver halide grains deviating from the average grain diameter by a certain amount. No such definitions are to be found anywhere in document (5).

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Furthermore, the preparation of monodispersed emulsions requires the use of specific techniques, such as the controlled double-jet grain-formation procedure, which is referred to in both (1), top of page 2, as well as in (6), column 5, lines 28 to 31 (see also the examples in column 11). Nor does the reference in Example 4 of (5) to emulsions comprising cubic silver chlorobromide grains having about 30 mole % silver bromide suggest in any way that the procedure used produces monodispersed emulsions. Document (5) does not once use the term "monodisperse", nor does it contain the definition routinely used to make it clear that the grain size distribution is a narrow one, nor does it make any reference to the special procedures used for preparing monodispersed emulsions. A skilled person will not therefore infer from the grain sizes specified in Example 1 of (5) that it is essential that monodispersed emulsions having a narrow grain size distribution be used. Instead, he will conclude that standard polydispersed emulsions with an approximate average grain diameter within the range specified can be used. At all events this value gives no indication as to whether or not the emulsion in question is a monodispersed emulsion having a narrow grain size distribution.

A further key element in a skilled person's interpretation of Example 1 is the fact that at the time (5) was published, in 1975, the use of monodispersed silver halide emulsions to prepare X-ray materials in the way described in document (5) was unusual. Indeed, the documents submitted to the Board indicate that it was not even known. A skilled person would therefore only have inferred that document (5) required the use of monodispersed silver halide emulsions, which at that time was unusual, if not to say unknown, if it had specifically used the term "monodispersed" or made clear reference to definitions of such emulsions or to procedures for their preparation. The

fact that later, i.e. in 1979, X-ray materials containing monodisperse emulsions did indeed become known from (6) - cf. Abstract and column 6, lines 14 to 21, column 10, lines 60 to 65 in combination with Emulsions II and III in column 11 -, has no bearing on the disclosure contained in (5). When considering the question of novelty, a prior document, in this case (5), must be interpreted in the light of common general knowledge available at its publication date. Common general knowledge which did not exist at this date but which only became available at a later date, cannot be used to interpret such a document.

The Board's interpretation of the content of (5), and in particular of Example 1, is consistent with document (8), page 217, Figure 3.7(b), which shows a polydispersed state of a medical X-ray film, and also with the comments in the affidavit of Ralph E. Jacobson, London (cf. paragraphs 4 to 6). On the other hand, the written Statement of Agfa-Gevaert submitted by the opponents on 21 October 1992, contains no conclusive arguments to support the view taken in the contested decision that monodispersed silver halide emulsions are disclosed in (5).

Therefore, the Board finds that the subject-matter of Claim 1 is novel  $\underline{vis}$  à  $\underline{vis}$  document (5).

5. Having so decided, the Board still cannot make a decision on the whole matter, because the Opposition Division has failed, as was stated before, adequately to examine the Opponents' submissions on inventive step.

Accordingly, in the exercise of the discretion conferred upon it by Article 111(1) EPC, the Board has decided to remit the case to the Opposition Division for further prosecution on the basis of the main request with the request that the case should be decided with utmost

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expedition, so as to bring the whole proceedings before the EPO to a conclusion.

In the course of its proceedings on remittal, the Opposition Division will need to consider whether, given that the object of the contested patent is to improve the light sensitivity and granularity of photographic materials known from (1) while reducing the silver content of the coated layer (cf. page 2, lines 25 to 26 of the patent specification), document (2) provides sufficiently comprehensive information for arriving at the solution claimed for this problem. Such knowledge may be obtained from the mixing method described on pages 234 to 236, which involves mixing different high-contrast emulsions with as uniform and fine-grain a solid phase as possible, and results either in the covering power being increased and the grain size decreased while the sensitivity remains unchanged, or in the light sensitivity being increased considerably for a given granularity (cf. bottom of page 234 in combination with page 236, third paragraph, second sentence).

In the Board's view, the subject-matter of the patent should also be examined for novelty vis à vis (1), given that (1) also relates to silver halide photographic materials having a light-sensitive layer comprising emulsions of differing average grain size, each having a narrow grain size distribution, meaning therefore that each can be described as "monodisperse" (cf. Claim 1 in combination with page 9, ninth to sixth lines from bottom and page 6, second line from bottom). The monodispersed emulsions of these known photographic materials are characterised in (1) by the following parameters:

. (a) average grain size: between 0.1  $\mu$  and 1  $\mu$  (Claim 2);

- (b) difference between average grain sizes of the monodisperse emulsions: 0.03  $\mu$  or more (Claim 2). Specifically disclosed in Example 2 of (1) are differences of average grain sizes of up to 0.1  $\mu$  (Sample 8, Emulsions C + B);
- (c) grain size distribution: 95% or more of all grains have a diameter deviating from the average grain diameter by about ±40% or less (bottom page 6 to top page 7).

Hence the question to be decided is whether this teaching can be cited against the novelty of the subject-matter of the disputed patent in the light of decisions T 198/84 (OJ EPO 1985, 209) and T 124/87 (OJ EPO 1989, 491).

Order

For these reasons, it is decided that:

- 1. The Opposition Division's decision is set aside.
- The case is remitted to the Opposition Division for further prosecution of the opposition on the basis of the main request.

The Registrar:

E. Görgmajier

The Chairman:

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