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D E C I S I O N
of 24 January 2002

Case Number: T 0438/99 - 3.5.2

Application Number: 91312017.6

Publication Number: 0493114

IPC: G11B 5/66

Language of the proceedings: EN

Title of invention:
Magnetic recording medium

Patentee:
KONICA CORPORATION

Opponent:
BASF Magnetics GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
"Added subject-matter - (yes)"

Decisions cited:
G 0011/91

Catchword:
A phrase in a passage in the description of a patent application which is essential to the disclosure of the invention or definition of the subject-matter for which protection is sought and which (phrase) cannot be interpreted or construed because it contains an unresolvable ambiguity

may, nevertheless, not be deleted under Article 123(2) EPC if the passage after amendment arguably conveys a different technical teaching; cf reasons 5.3.



Case Number: T 0438/99 - 3.5.2

D E C I S I O N
of the Technical Board of Appeal 3.5.2
of 24 January 2002

Appellant:
(Opponent)

BASF Magnetics GmbH
Kaiser-Wilhelm-Strasse 52
D-67059 Ludwigshafen (DE)

Representative:

Schweiger, George, Dr.
Reitstötter, Kinzebach & Partner
Postfach 86 06 49
D-81633 München (DE)

Respondent:
(Proprietor of the patent)

KONICA CORPORATION
26-2, Nishishinjuku 1-chome
Shinjuku-ku
Tokyo 160 (JP)

Representative:

Ellis-Jones, Patrick George Armine
J.A. KEMP & CO
14 South Square
Gray's Inn
London WC1R 5JJ (GB)

Decision under appeal:

Interlocutory decision of the Opposition Division
of the European Patent Office posted 16 February
1999 concerning maintenance of European patent
No. 0 493 114 in amended form.

Composition of the Board:

Chairman: W. J. L. Wheeler
Members: R. G. O'Connell
B. J. Schachenmann

Summary of Facts and Submissions

- I. This is an appeal by the opponent as sole appellant from the interlocutory decision of the opposition division proposing to maintain European patent No. 493 114 in amended form.
- II. Claim 1 of the application as originally filed reads as follows:

"1. A magnetic recording medium comprising:

a non-magnetic support provided thereon a plurality of layers, among which the outermost layer contains a magnetic metal powder having an average major axis length of not more than 250 nm and a ratio of the average major axis length divided by **an average X-ray measured particle size** (board's emphasis) being less than 12."

The description of the application as originally filed (page 6, lines 19 to 24, corresponding to page 3, lines 33 to 35 of the published application) includes the following definition:

"The above-mentioned term, 'an average crystallite size', means an average value obtained by measuring 100 pieces of particles **in the (111) direction** (board's emphasis) in an X-ray diffraction method, and the average value thereby obtained corresponds to the average value of the minor axes of the same particles."

In the course of the examination procedure the applicant amended this definition by deleting the words

"in the (111) direction in" and inserting "by" to form the text of the description of the granted patent and of the amended patent as approved by the opposition division in the decision under appeal.

That part of claim 1 as approved by the opposition division which - proleptically speaking, in view of the conclusion below - is relevant to the present decision reads as follows:

"1. A magnetic recording medium comprising:

a non-magnetic support provided thereon a plurality of layers including an outermost layer, wherein the outermost layer contains a magnetic metal powder of the Fe-Al type having an average major axis length of less than 250 nm and a ratio of the average major axis length divided by **average crystallite size measured by X-ray diffractometry** (board's emphasis) of less than 10, and wherein the average crystallite size is an average value obtained by measuring 100 pieces of the magnetic particles by an X-ray diffraction method, excluding...."

III. In a communication annexed to a summons to oral proceedings the board expressed a reasoned provisional view that the appellant opponent's contention that the description had been amended impermissibly by deletion of the phrase "**in the (111) direction**" appeared to be correct.

IV. At oral proceedings which took place before the board on 24 January 2002 the respondent proprietor filed a main and two auxiliary requests. The relevant part of claim 1 of the main request reads as follows:

"1. A magnetic recording medium comprising:

a non-magnetic support provided thereon a plurality of layers including an outermost layer, wherein the outermost layer contains a magnetic metal powder of the Fe-Al type having an average major axis length of less than 250 nm and a ratio of the average major axis length divided by average crystallite size measured **in the (110) direction** (board's emphasis) by X-ray diffractometry of less than 10, and wherein the average crystallite size is an average value obtained by measuring 100 pieces of the magnetic particles by an X-ray diffraction method, excluding....."

The wording of the relevant parts of claims 1 of the first and second auxiliary requests is the same as that approved by the opposition division (end of point II above), ie it omits the phrase "**in the (110) direction**".

V. The following documents were filed, among others, with the statement of opposition:

D4: Moore, Physikalische Chemie, 3. Auflage,
Seite 1046

D5: Technical Data for Magnetic Powder, Dowa Mining
Company, Produkt HW-1A1 3 December 1988 and
Pigmentprüfungsbericht, BASF, Probe HW-1,
10 April 1990.

In the course of the appeal the appellant opponent filed further documents referenced D10 and D10A to D10E which are commercial correspondence and shipping documents relating to the product HW-1A1 mentioned

in D5.

Also in the course of the appeal, the respondent proprietor filed documents including:

DP1: Declaration of Mr. Narito Goto dated
20 December 2001

DP2: X-ray diffraction measurements on Fe-Al powder,
sample K1650SB-159.

VI. The appellant opponent's arguments on the preliminary issue of the permissibility under Article 123(2) EPC of the amendment of the description by deletion of the phrase "in the (111) direction" and its possible replacement by the phrase "in the (110) direction" can be summarised as follows:

The criteria to be applied in judging the permissibility of a correction under Rule 88, second sentence, EPC had been set out in decision G 11/91 of the Enlarged Board of Appeal, in particular at points 5, 6 and 7 of the reasons and neither of the corrections requested by the respondent proprietor, ie replacement of (111) by (110) (main request), or simple deletion (1st and 2nd auxiliary requests), met this standard.

The teaching in the description of the application as originally filed at page 6, line 19 to 24, that particle or crystallite size meant size measured by X-ray diffraction along the (111) direction was an essential aspect of the original disclosure. It was common general knowledge in the art, as evidenced by

D4, that there was a plurality of directions, conventionally represented by the Miller indices (hkl) of the corresponding set of diffracting planes, along which the X-ray diffraction measurement could take place; this was true in particular for the body-centred cubic (bcc) lattice (the relevant lattice for FeAl) for which the drawing in D4 illustrated three examples, viz (200), (110) and (222). Furthermore different directions of measurement gave rise to different crystallite sizes as was shown by the data sheet D5, which reported different crystallite sizes d_{kr} , viz 15.5 and 12.5 nm for the directions (110) and (200) respectively for the magnetic powder which was the subject of that report. The value for the coercivity H_c of 110 kAm⁻¹ specified in D5 indicated to the person skilled in the art that the powder concerned was a metal powder of the FeAl type.

Although (111) was not a usual direction, being a very weak peak, the person skilled in the art could not conclude directly and unambiguously that the description of the application as originally filed was not teaching this as an invention; even less could he conclude directly and unambiguously that the description was actually teaching (110). Although the direction (110) was mentioned in the priority document, G 11/91 explicitly decided at point 7 of the reasons that the latter could not be used to justify a correction under Rule 88, second sentence, EPC, since it was not part of the application as originally filed for the purpose of establishing the original disclosure.

As regards the declaration of Mr. Narito Goto, who was one of the inventors and not an independent expert, an

objective assessment of this document (DP1) showed that in fact it confirmed the existence of different (hkl) values and that, in particular, further peaks exist, albeit weaker. It was also notable that DP1 did not mention the direction (200), which as shown in D5 and confirmed by the respondent proprietor's own document DP2 filed at the oral proceedings before the board, also provided a peak usable for measuring crystallite size. Hence DP1 provided no support for the respondent's contention that the person skilled in the art would realise not only that (111) was not a plausible direction, but that (200) was also not plausible.

VII. The respondent proprietor's arguments on the preliminary issue of the permissibility under Article 123(2) EPC of the amendment of the description by deletion of the phrase "in the (111) direction" and its possible replacement by the phrase "in the (110) direction" can be summarised as follows:

The reference in the description of the application as originally filed to (111) resulted from a simple clerical error in the act of transcribing the correct and intended value (110) from the priority document. As was evidenced by the declaration of Mr. Narita Goto (DP1) (an expert in the field whose evidence should not be discounted merely because he was also one of the inventors), and confirmed by the X-ray diffraction measurements (DP2) on FeAl powder of the type featuring in the present application, the local peak occurring in the (111) direction was extremely faint compared to the conventional (110) peak. Hence the person skilled in the art would realise immediately that the value (111) was implausible. As was also confirmed both by DP1 and

DP2, he would equally immediately appreciate that of the two reasonably plausible alternative directions (110) and (200), the former was the overwhelmingly plausible candidate for correcting the obviously erroneous value. It was the conventional direction, it had the largest measurement peak by far, and it was typographically closest to the clearly erroneous value.

Although the priority document could not be relied on directly to correct the erroneous value (111) to (110), it could, nonetheless, be adduced as evidence of the common general knowledge in the art that (110) was the conventional direction used for measuring crystallite size by X-ray diffractometry in the case of an FeAl ferromagnetic metal powder having a crystal structure represented by a body-centred cubic lattice; cf G 11/91, reasons point 7, second sentence ("As a result of the prohibition of extension under Article 123(2) EPC, documents other than the description, claims and drawings may only be used insofar as they are sufficient for proving the common general knowledge on the date of filing").

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

IX. The respondent proprietor requested that the appeal be dismissed and that the patent be maintained as amended in accordance with the following requests:

main request: Claims 1 to 6 filed as main request with letter of 3 March 2000, with replacement page 1 filed during the oral

proceedings before the board;

1st auxiliary request: Claims 1 to 6 filed as main request with letter of 3 March 2000;

2nd auxiliary request: Claims 1 to 6 filed as first auxiliary request with letter of 3 March 2000.

Reasons for the Decision

1. The appeal is admissible.
2. A preliminary and potentially determinative issue to be decided in this appeal is the permissibility under Article 123(2) EPC of the amendment of the description of the application as originally filed by deletion of the reference to the use of the (111) crystallographic direction for determination of crystallite size by X-ray diffraction, an amendment which was effected in the examination procedure, objected to by the opponent in the notice of opposition and explicitly approved by the opposition division in the decision under appeal at point 2 of the reasons. A second and closely linked issue is the permissibility under Article 123(2) EPC of the proposed amendment of claim 1 in the present appeal proceedings by insertion of a reference to the (110) direction, an amendment which, by the same token, the opposition division indicated as one which the examining division "could also have allowed" as a correction of a typographical error under Rule 88, second sentence, EPC.

3. As regards this first issue, the Enlarged Board of Appeal in its decision **G 11/91**, Glu-Gln / Celtrix OJ EPO 1993, 125 explained the relationship between Article 123(2) EPC and Rule 88, second sentence, EPC, and summarised it as follows:

"1. The parts of a European patent application or of a European patent relating to the disclosure (the description, claims and drawings) may be corrected under Rule 88, second sentence, EPC only within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of these documents as filed. Such a correction is of a strictly declaratory nature and thus does not infringe the prohibition of extension under Article 123(2) EPC.

2. Evidence of what was common general knowledge on the date of filing may be furnished in connection with an admissible request for correction in any suitable form."

- 3.1 In particular, at point 2 of the reasons, last two sentences, the Enlarged Board of Appeal specified a first precondition that a corrective amendment must meet: "The requirement laid down in Rule 88, second sentence, EPC that a correction must be obvious further implies that the incorrect information is objectively recognisable, too. The skilled person must thus be in a position objectively and unambiguously to recognise the incorrect information using common general knowledge." and again at point 5: ".. such an obvious error that a skilled person is in no doubt that this information is not correct and - considered objectively - cannot be

meant to read as such. If, on the other hand, it is doubtful whether any information at all is incorrect, then a correction is ruled out. The same applies if incorrect information only becomes apparent in the light of the proposed correction."

3.2 In addition, at point 6 of the reasons, the Enlarged Board of Appeal specified a second precondition that a corrective amendment must meet: "The parts of a European patent application as filed which relate to the disclosure must further allow a skilled person - using the common general knowledge on the date of filing - directly and unequivocally to ascertain the precise content of the information the person making the request actually meant to give, instead of the incorrect particulars, on the date of filing or when making an amendment under Article 123 EPC, so that, for said skilled person, "it is immediately evident that nothing else would have been intended than what is offered as the correction" (Rule 88, second sentence, EPC). However, if there is any doubt that nothing else would have been intended than what is offered as the correction, a correction cannot be made."

4. The board is persuaded of the plausibility of the respondent proprietor's submission that the person skilled in the art would appreciate that the reference in the description of the application as originally filed to measuring particle or crystallite size by X-ray diffraction along the (111) direction could not have been intended. The appellant opponent has not adduced any evidence that measurements are ever made on FeAl type bcc lattice powders along this direction, the document D5 showing only (110) and (200), while the document DP2 provides, in the judgement of the board,

convincing evidence that the (111) peak is so much weaker than peaks for, eg (110) and (200), that it is simply not credible that the latter direction would ever be used, and certainly would not be taught in a patent application without comment.

- 4.1 For the avoidance of doubt which could be provoked by the board's conclusion on this first issue, three conceivable arguments in support of this conclusion which, on reflection, are not convincing should be mentioned for completeness. Firstly - as is implicit in the Enlarged Board of Appeal's reasoning quoted above - an argument that a skilled person who attempted to implement the literal teaching of the application would soon discover that it was virtually impossible to make measurements in the (111) direction because the peak was scarcely above the noise level, cannot be entertained, since it would represent an undue burden for the reader of the specification if he had to conduct experiments to interpret or construe the disclosure. Secondly the mere disparity between the value (111) in the description of the application as originally filed and the value (110) in the priority document does not of itself allow any conclusion to be drawn about the existence of an error in the application documents proper. Thirdly the mention of (110) in the priority document in this particular case was not in a context which could provide significant evidential support for an assertion that it was a matter of common general knowledge in the art that the value (111) could not be correct, although, as correctly pointed out by the respondent proprietor, it was in principle possible that a priority document could constitute or include evidence as to the common general knowledge in the art; cf G 11/91,

reasons point 7 : "documents other than the description, claims and drawings may only be used insofar as they are sufficient for proving the common general knowledge on the date of filing."

4.2 Hence the board concludes that the first precondition for the permissibility of a corrective amendment (cf 3.1 above) is fulfilled.

5. As regards the second precondition (point 3.2 above), however, ie that it should be immediately evident that nothing else would have been intended than what is offered as the correction, the board is not persuaded of the plausibility of the respondent proprietor's argument.

5.1 The "offered correction" now takes two alternative forms:

(i) replacement of the erroneous value (111) by the allegedly obviously correct value (110), which features in the respondent's main request or,

(ii) deletion without replacement of the erroneous value (111), which features in the other requests.

5.2 As regards the offered correction (110), the evidence of usable measurement peaks in DP2 serves, in the judgement of the board, to confirm the evidence in D5 that (110) is not the only plausible correction. D5 cites (differing) results for crystallite size based on (110) and (200) directions, while DP2 shows that whereas the (110) peak is the largest, other significant peaks occur, eg at (200) and (211). The respondent proprietor's argument that the fact that the

most plausible value (110) differs in only one digit from the recognisably false value (111) would enable the person skilled in the art to resolve the ambiguity in favour of (110), is not convincing, since precisely in the disclosure of an invention the skilled person has to expect the unexpected. An inventive teaching necessarily departs from routine procedures at some point. Indeed it can be quite as plausibly argued that if the standard or most usual value (110) was to be used it would not, as a default value, need to be indicated, whereas the fact that a specific measurement direction is mentioned suggests that significant technical information was being imparted at this point. In this connection the board is mindful of the fact, evidenced by D5, that crystallite size is a parameter dependent on the measurement method employed, resulting in different "sizes" for measurements along different directions. In addition, the fact that the claimed powder is distinguished from prior art powders by a rather small difference in the crystallite size suggests that the precise measurement method used to determine this size could well be significant.

- 5.2.1 Hence the board concludes that the second precondition of being immediately evident that nothing else would have been intended than what is offered as the correction, is not met by the offered correction of (110) in accordance with the respondent's main request. As pointed out in G 11/91 at point 6 of the reasons, last sentence, the existence of a doubt precludes the permissibility of corrective amendment. Here the board judges that the appellant opponent has convincingly shown that such a doubt exists, at least as regards the choice of the "correct" value.

5.3 As regards the offered correction of deletion without replacement the board judges this to be quite implausible. Although it is a usual pragmatic practice for a reader who encounters a term in a document which is unintelligible in context to proceed at first by ignoring the term and trying to make sense of the rest of the document, this kind of next and best resort of making do with what one has is *ipso facto* not a way of divining the author's intention in relation to the unintelligible term, so as to be able to correct the latter. The doubt as to the likelihood that the drafter of the application as filed while writing "in the (111) direction" intended not to refer to any direction whatever, which would be the effect of the proposed corrective amendment, is so great, in the judgement of the board, as to border on certainty. The fact that a term or phrase cannot be interpreted or construed because it is unresolvably ambiguous does not necessarily mean that its deletion is a permissible amendment under Article 123(2) EPC; there remains a residual clear meaning in the ambiguous term, eg, as in the present case, that a specific direction was taught and suppressing this fact results in a different technical teaching. In the unamended text the reader is taught that the direction is significant, in the proposed amended text the reader is taught, at least implicitly, that the direction is not significant.

5.3.1 Hence the board concludes that the second precondition of being immediately evident that nothing else would have been intended than what is offered as the correction, is not met by the offered correction of deletion of (111) without replacement (other than consequential grammatical amendment) in accordance with the respondent's first and second auxiliary requests.

6. Since all the respondent proprietor's requests involve amendments to the application or patent which are not permissible under Article 123(2) EPC, they all fall to be refused.

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:

M. Hörnell

W.J.L. Wheeler