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D E C I S I O N
of 12 May 2000

Case Number: T 0587/98 - 3.5.2

Application Number: 95100700.4

Publication Number: 0661700

IPC: G11B 11/10

Language of the proceedings: EN

Title of invention:

Use of a quasi-amorphous or amorphous zirconia dielectric layer for optical or magneto-optic data storage media

Applicant:

Komag, Inc.

Headword:

Divisional claim conflicting with parent

Relevant legal provisions:

EPC Art. 76, 97(1), 125

EPC R. 67

Keyword:

"Independent claim of parent having the scope of a 'dependent' claim in relation to main claim of divisional - yes"

"No basis in EPC for refusing divisional in this situation"

Decisions cited:

-

Headnote

There is no express or implicit provision in the EPC which prohibits the presence in a divisional application of an independent claim - explicitly or as a notional claim arrived at by partitioning of an actual claim into notional claims reciting explicit alternatives - which is related to an independent claim in the parent application in such a way that

the 'parent' claim includes all the features of the
'divisional' claim combined with an additional feature.

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Headnote

Headnote will follow.



Case Number: T 0587/98 - 3.5.2

D E C I S I O N
of the Technical Board of Appeal 3.5.2
of 12 May 2000

Appellant:

Komag, Inc.
275 South Hillview Drive
Milpitas
California 95035 (US)

Representative:

Schulz, Rütger, Dr.Dipl.-Phys.
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D-80331 München (DE)

Decision under appeal:

Decision of the Examining Division of the
European Patent Office posted 2 March 1998
refusing European patent application
No. 95 100 700.4 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: W. J. L. Wheeler
Members: R. G. O'Connell
P. H. Mühlens

Summary of Facts and Submissions

I. The appeal contests the decision of the examining division to refuse European patent application No. 95 100 700.4, which was filed as a divisional application to European patent application No. 91 115 600.8 on which European patent No. 0 475 452 has since been granted.

II. The reason given for the refusal was that the subject-matter of the present divisional application and that of the patent granted on the parent application overlapped and that in the overlap region the same subject-matter was claimed twice. Consequently the claims filed on 27 March 1997 were not allowable under Article 125 EPC.

III. On appeal, the appellant filed claims 1 to 7 of a main request (whose subject-matter is identical with that of the claims refused by the decision under appeal) and claims 1 to 7 of an auxiliary request, and requested that the decision under appeal be set aside and that a patent be granted with these claims.

IV. The application according to the main request consists of the following documents:

Description: pages 2 to 4, 6 and 9 to 13 as originally filed, and pages 1, 5, 5a, 7 and 8 as filed on 27 March 1997;

Claims 1 to 7 as recited on page 2 of the appeal filed on 28 April 1998;

Drawings: sheets 1/6 to 6/6 as originally filed.

V. The independent claims of the present divisional application are worded as follows:

"1. A data storage device comprising a substrate (101, 201a, 251) and an optical or magneto-optic recording layer (104, 203, 252) formed on said substrate, said data storage device further characterized by comprising:

an amorphous or near-amorphous ZrO_2 -layer (102, 106, 204, 153) comprising more than about 65% ZrO_2 , said ZrO_2 -layer being formed either above said recording layer (102, 106, 204, 253) or between said recording layer (102, 106, 204, 253) and said substrate (101, 201a, 251) wherein the crystallites in said ZrO_2 -layer, if any, have a size less than or equal to about 10 Å, said ZrO_2 -layer (102, 106, 204, 233) further comprising a stabilizer and a metal oxide, said metal oxide having substantially no solid solubility in bulk ZrO_2 , and its amount being less than about 30% of said ZrO_2 layer."

"4. A method for manufacturing a data storage device comprising the steps of forming an optical or magneto-optic recording layer (102, 106, 204, 253) on a substrate (101, 201a, 251), said method further characterized by comprising:

forming an amorphous or near-amorphous ZrO_2 -layer (102, 106, 204, 253) comprising more than about 65% ZrO_2 either above said recording layer (102, 106, 204, 253) or between said recording layer (102, 106, 204, 253) and said substrate (101, 201a, 251), wherein the crystallites in said ZrO_2 -layer, if any, have a size less than or equal to about 10 Å, said ZrO_2 -layer (102, 106, 204, 253) further comprising a stabilizer and a metal oxide, said metal oxide having substantially no

solid solubility in bulk ZrO_2 , and its amount being less than about 30% of said ZrO_2 -layer."

VI. The independent claims of the patent granted on the parent application are worded as follows:

"1. A structure for use as data storage device comprising a substrate (101), a first dielectric layer (102, 106) formed on said substrate, and a magneto-optic layer (104) formed on said first dielectric layer, and a second dielectric layer (102, 106) formed on said magneto-optic layer (104), characterised in that at least one of said first and second dielectric layers is amorphous or near-amorphous and comprises more than about 65% ZrO_2 , wherein the ZrO_2 crystallites, if any, have a size less than or equal to about 10\AA , a stabilizer and a metal oxide having substantially no solid solubility in bulk ZrO_2 , said metal oxide comprising less than about 30% by weight of said at least one layer."

"11. A method for forming a data storage device comprising the steps of depositing a first dielectric layer (102, 106) on a substrate (101), forming a magneto-optic layer (104) on said first dielectric layer, and forming a second dielectric layer (102, 106) on said magneto-optic layer, characterised in that at least one of said first and second dielectric layers is amorphous or near-amorphous and comprises more than about 65% ZrO_2 , wherein the ZrO_2 crystallites, if any, have a size less than or equal to about 10\AA a stabilizer and a metal oxide having substantially no solid solubility in bulk ZrO_2 , said metal oxide comprising less than about 30% by weight of said at least one layer."

VII. The appellant's arguments may be summarised as follows:

The refusal was based on the sole argument that it was a general procedural principle that two patents should not be granted to the same applicant for the same invention. However, the EPC did not include any provision to prevent double-patenting. The guidelines simply alleged without proof that a ban on double-patenting was an accepted legal principle in most patent systems and they did not show that this principle had been incorporated into the EPC. In any case, the claims of the present divisional application were not of identical scope with those of the parent patent. The claims of the parent patent required a sandwich structure of three layers on the substrate in which the recording layer had to be a magneto-optic layer whereas the claims of the divisional required only two layers on the substrate and the recording layer could be an optical or a magneto-optic recording layer. The claims of the divisional application were broader than the claims of the patent granted on the parent and therefore were not for the same invention. Accordingly the alleged "ban on double-patenting" as set forth in the guidelines C-IV 6.4 and C-VI 9.6 did not apply in the present case.

Reasons for the Decision

1. The appeal is admissible.
2. *Comparison of the independent claims of the parent and divisional application*
 - 2.1 Consideration of the respective independent device claims in parent and divisional will suffice to decide this appeal, since the conclusion reached also applies

to the independent method claims. Claim 1 of the parent specifies, inter alia, a structure comprising three layers in addition to the substrate: namely a first dielectric layer formed on said substrate, a magneto-optic(recording)layer formed on said first dielectric layer and a second dielectric layer formed on said magneto-optic layer. All three layers must be present. This structure may be represented as $SDR_{mo}D$.

2.2 Claim 1 of the divisional application specifies (at least) two layers in addition to the substrate: namely a recording layer which may be an optical or a magneto-optic layer, and a dielectric layer which may be formed either on the recording layer or between it and the substrate. Using the boolean connective 'xor' to set out the explicit mutually exclusive alternatives, this structure may be represented as SDR_{mo} xor SDR_o xor $SR_{mo}D$ xor SR_oD .

2.3 Denoting the first of the above alternatives as 'A' and the second dielectric layer feature D in claim 1 of the parent as 'B', the relevant relationship between the claims may be expressed as the fact that the parent claims AB (A with B) while the divisional claims A (implicitly with or without B).

2.4 There is no disagreement about the above facts as such but the appellant disagrees with the examining division's categorisation of this factual relationship between parent and divisional and the legal consequences inferred therefrom. In effect the examining division regarded the invention (subject-matter) AB claimed explicitly in claim 1 of the parent as claimed again implicitly in claim 1 of the divisional since the latter claim to A was a claim to A with or without B. Hence, on this view, granting the

divisional would amount to granting a second patent for the same invention.

3. *Legal basis of the decision under appeal*

3.1 Given its view of the facts the examining division felt obliged to refuse the application on its interpretation of the Guidelines for examination at the EPO and felt empowered to do so pursuant to Article 97(1) EPC on its interpretation of Article 125 EPC.

3.2 The relevant passages of the guidelines read as follows:

C-IV, 6.4: "The Convention does not deal explicitly with the case of copending European applications of the same effective date. However, **it is an accepted principle in most patent systems that two patents shall not be granted to the same applicant for one invention** (board's emphasis). It is permissible to allow an applicant to proceed with two applications having the same description where the claims are quite distinct in scope and directed to different inventions. However, in the rare case in which there are two or more European applications from the same applicant ... and the claims of those applications have the same priority date and relate to the same invention (the claims conflicting in the manner explained in VI, 9.6), the applicant should be told that he must either amend one or more of the applications in such a manner that they no longer claim the same invention, or choose which one of those applications he wishes to proceed to grant."

C-VI, 9.6: "The parent and divisional applications may not claim the same subject-matter (see IV, 6.4). This means not only that they must not contain claims of substantially identical scope, but also that one

application must not claim the subject-matter claimed in the other, even in different words. The difference between the claimed subject-matter of the two applications must be clearly distinguishable. As a general rule, however, one application may claim its own subject-matter in combination with that of the other application. In other words, if the parent and divisional applications claim separate and distinct elements A and B respectively which function in combination, one of the two applications may also include a claim for A plus B."

3.3 Although it is noted that the case referred to at the end of the above quoted passage is not strictly the same as that in the present appeal, where B (cf point 2.3 above) is not a separate and distinct element but a second dielectric layer feature which is not susceptible of being claimed on its own, the board agrees with the appellant's contention that the claims in the present case are not "conflicting" claims in the sense of the guidelines. Hence the question whether there is any legal basis to be found in the law and practice of the contracting states for the prohibition of "conflicting" claims expressed in the guidelines does not fall to be decided in this appeal. It is however necessary to decide the particular question whether there is a legal basis for refusal on the facts of the present case, ie whether there is a requirement of the EPC which is not met (cf Article 97(1) EPC).

3.4 In fact claims to A and AB in successive applications are typical of the situation prevailing when an invention is subsequently further developed by addition of a feature B. Where the earlier application is prepublished (Article 54(2)EPC relationship) and AB represents an inventive combination, the granting of two patents to the same proprietor is regarded as

unexceptionable despite the fact that a unlicensed user of the modified version of A, viz AB, will infringe two patents (*double jeopardy*). If the earlier application is not prepublished (Article 54(3) EPC relationship) a patent can be granted for AB even if it is an obvious variant of A. Given that this kind of "overlap" is not prohibited under the EPC in the situations outlined immediately above, it is not apparent to the board why it should be prohibited between divisional and parent applications. It may perhaps be thought that such a prohibition is desirable to prevent the proliferation of patents for obvious variants, but it would appear invidious to make a distinction between copending applications in a Article 54(3) EPC relationship and divisional applications in this respect. Above all such a prohibition would require a legal basis.

3.5 The examining division appears to have assumed that the reference in the guidelines to "an accepted principle in most patent systems" meant that the provisions of Article 125 EPC ("In the absence of procedural provisions in this Convention, the European Patent Office shall take into account the principles of procedural law generally recognised in the Contracting States.") provided the legal basis for the prohibition of "conflicting" claims laid down in the guidelines, and hence, on its interpretation of the guidelines, a legal basis for the refusal decision under appeal.

3.6 The board observes that the procedure governing the filing of divisional applications is laid down in Part III of the EPC in Article 76 EPC and, pursuant to subarticle (3) thereof, "the procedure to be followed in carrying out the provisions of paragraph 1, the special conditions to be complied with by a divisional application ... are laid down in the Implementing Regulations." There is, in the judgement of the board,

a legal presumption that the institution of divisional application thus defined in the convention is self-contained and complete. Hence, quite apart from the consideration that a prohibition, if any, of "conflicting" claims in the wide sense applied by the examining division in the decision under appeal would be a matter of substantive law rather than a matter of procedure - and Article 125 EPC is not applicable to substantive law (cf Singer/Stauder EPÜ, 2nd edition, page 786, margin numbers 4 and 5) -, the condition precedent for the application of Article 125 EPC - "the absence of procedural provisions in this Convention" - is not fulfilled. It follows that Article 125 EPC is not applicable to the facts of the present case.

- 3.7 The board concludes that there is no express or implicit provision in the EPC which prohibits the presence in a divisional application of an independent claim - explicitly or as a notional claim arrived at by partitioning of an actual claim into notional claims reciting explicit alternatives - which is related to an independent claim in the parent application (or patent if, as in the present case, it has already been granted) in such a way that the 'parent' claim includes all the features of the 'divisional' claim combined with an additional feature.
4. Hence the decision under appeal must be set aside and the case remitted to the department of first instance for further prosecution.
5. *Reimbursement of the appeal fee - Rule 67 EPC*

In the present case the application was refused under Article 97(1) EPC for non-compliance with a non-existent requirement of the EPC. The refusal therefore infringed the applicant's fundamental right that there

should be a legal basis for any requirement relied on to invoke Article 97(1) EPC. Since the appellant was obliged to file the present appeal to overcome this refusal the board judges it to be equitable that the appeal fee should be reimbursed.

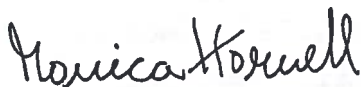
Order

For these reasons it is decided that:

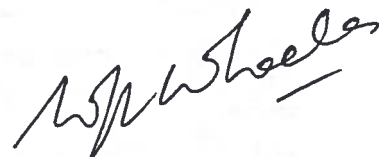
1. The decision under appeal is set aside.
2. The appeal fee shall be reimbursed.
3. The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chairman:



M. Hörnell



W. J. L. Wheeler