DECISION
of 17 October 2001

Case Number: T 0723/99 - 3.5.2
Application Number: 91304510.0
Publication Number: 0458558
IPC: G11B 23/03
Language of the proceedings: EN
Title of invention:
A data recording cartridge and a flexible magnetic recording medium and a method of manufacturing the same
Applicant:
Hitachi Maxell Ltd.
Opponent:
-
Headword:
-
Relevant legal provisions:
EPC Art. 123(2), 84, 116.
EPC R. 71(2)
Keyword:
"Amendments - broadening of specific disclosure (yes)"
"Oral proceedings in absence of the appellant after withdrawal of the request"
Decisions cited:
-
Catchword:
-
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DECISION
of the Technical Board of Appeal 3.5.2
of 17 October 2001

Appellant: Hitachi Maxell Ltd.
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 26 February 1999 refusing European patent application No. 91 304 510.0 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: W. J. L. Wheeler
Members: F. Edlinger
P. H. Muehlens
Summary of Facts and Submissions

I. The appeal is against the decision of the examining division refusing European patent application No. 91 304 510.0.

II. The wording of claim 1 on which the decision under appeal is based is as follows:

"A data recording cartridge provided with a cartridge case and a recording medium accommodated therein, wherein a shutter is supported slidably by the cartridge case and the cartridge case is molded from at least one of the following materials:

(1) composition of uniformly dispersed styrol resin and nitrogen containing resin;

(2) composition of uniformly dispersed styrol resin and ester resin;

(3) styrol resin styrene of which is partially substituted with á-methylstyrene;

(4) styrene-maleic anhydride copolymer modified with rubber;

(5) composition of polypropylene polymer containing an inorganic filler dispersed therein;

(6) copolymer of N-substituted maleimide resin and styrol resin; and

(7) composition of uniformly dispersed N-substituted maleimide resin and styrol resin."
Independent claim 6 specified the same materials (1) to (7) but had the following introductory part:

"A data recording cartridge provided with a cartridge case and a recording medium accommodated therein, wherein the cartridge case has the increased amount of warping of 0.07 mm or less when in the form of 3.5 inch or smaller magnetic disc cartridge and when left for 96 hours in the environment of 85°C and 40% RH, and the cartridge case is molded from at least one of the following materials: ...".

III. The contested decision expressed the opinion that document EP-A-0 242 158 anticipated the subject-matter of claim 1 with alternative materials (1) and (2). Furthermore, the contested decision made additional observations concerning other objections which had not been overcome. In particular, the feature of "increased amount of warping" as specified in claim 6 was considered as unclear (Article 84 EPC). Moreover, this feature was seen either as a redundant result feature if the materials (1) to (7) automatically met this condition, or as insufficiently disclosed (Article 83 EPC) if it could be interpreted as an independent technical feature (serving to define sub-classes of these materials).

IV. With the statement of grounds of appeal, the appellant filed new claims corresponding to those previously on file, except that the features of previous claim 6 relating to the "increased amount of warping" had been incorporated into claim 1.

V. In a communication sent by the Board with the summons to oral proceedings, the Board expressed doubts that
the feature relating to the "increased amount of warping" was disclosed in the application as filed, in the combination as specified in claim 1 (Article 123(2) EPC). Even if it were disclosed, the feature appeared unsuitable for clearly characterising sub-classes of the specified materials (Article 84 EPC) and there were doubts as to whether the application contained sufficient information to enable the person skilled in the art to arrive at the desired result without undue burden (Article 83 EPC).

VI. With a letter dated 21 September 2001, the appellant filed new claims 1 to 6 as a main request and claims 1 to 5 as an auxiliary request. Claim 1 of the main request is worded as follows:

"A data recording cartridge provided with a cartridge case and a recording medium accommodated therein, wherein a shutter is supported slidably by the cartridge case, the cartridge case has the increased amount of warping of 0.07 mm or less when in the form of 3.5 inch or smaller disc cartridge and when left for 96 hours in the environment of 85°C and 40% RH, and the cartridge case is molded from at least one of the following materials:

(1) styrene-maleic anhydride copolymer modified with rubber;

(2) composition of polypropylene polymer and acid-treated olefin polymer;

(3) copolymer of N-substituted maleimide resin and styrene or composition of N-substituted maleimide resin and styrol resin; and
(4) composition of uniformly dispersed styrol resin and rubber resin wherein styrene of the styrol resin is partially substituted with α-methylstyrene and the content of α-methylstyrene is 20 - 60% by weight."

Claim 1 of the auxiliary request has the same introductory part but is limited to material (1).

VII. The appellant essentially argued as follows:

The object of the present application was to improve heat resistance, mouldability and mechanical strength, etc, which were required of a cartridge case. These objectives were achieved by the materials specified in claim 1. Thus, deformation of a central portion of a cartridge case could be prevented and stable sliding of a shutter could be achieved with a cartridge case of sufficiently small thickness moulded from one of these materials. The materials had excellent properties for moulding a cartridge case and were novel and inventive over the cited prior art.

Concerning the objections raised against the feature of the "increased amount of warping", the appellant referred to arguments presented to the examining division in a letter dated 20 March 1998. These arguments may be summarised as follows:

The feature referred to an "increased amount", ie the change in the amount of warping that resulted from materials being subjected to the test (left for 96 hours in the environment of 85°C and 40% RH). This maximum amount of warping produced by the test constituted a functional feature defining the materials used to form the cartridge cases. The person skilled in
the art, once he was given the information that he needed a material which had a certain maximum amount of warping under the environmental conditions specified in the claims, only had to consider the relative amounts of the components used in the materials as specified. The variation left to the skilled person was therefore not onerous, and it could easily be verified by trivial dimensional measurements whether the selected material behaved as required by the present claims.

VIII. With a letter dated 9 October 2001, the appellant withdrew his request for oral proceedings and requested that the procedure be continued in writing. The appellant thus requested that the decision under appeal be set aside and a patent be granted on the basis of claims 1 to 6 of the main request filed with letter of 21 September 2001 or on the basis of claims 1 to 5 of the auxiliary request filed with letter of 21 September 2001.

IX. Oral proceedings were held on 17 October 2001 in the absence of the duly summoned appellant, at the end of which the decision of the Board was given orally.

Reasons for the Decision

1. The appeal is admissible.

2. In the circumstances of the present case where oral proceedings had been arranged at the initial request of the appellant, where the written submissions of the appellant were complete and the case had been prepared to ensure that it was ready for decision at the end of the oral proceedings (Article 11(3) RPBA), the Board
considered it to be expedient, in the meaning of Article 116(1) EPC, to hold the oral proceedings as scheduled in the absence of the appellant as provided by Rule 71(2) EPC. The appellant thus should not be surprised that a decision was taken at the date of the scheduled oral proceedings.

3. The feature of claim 1 of both the main request and the auxiliary request that "the cartridge case has the increased amount of warping of 0.07 mm or less when in the form of 3.5 inch or smaller disc cartridge and when left for 96 hours in the environment of 85°C and 40% RH" has been incorporated into these claims by amendments which were made in response to objections of lack of novelty raised by the examining division.

4. The Board accepts that the application as filed (page 45, line 7 to page 47, line 5, of the application as filed, in particular Tables 3 and 4) discloses specific specimens (1) to (8), for which an "increased amount of warping" (arguably the deformation which is caused by the specified environmental conditions; cf page 3, line 10 to page 4, paragraph 2, of the application as filed) was measured which was less than or equal to 0.07 mm (Table 4). In this context, the person skilled in the art would derive the information that the tested cartridge cases having specific design features had the specified amounts of warping and that the amount of warping was compared with that of an embodiment of the prior art (specimen (9); cf page 47, lines 1 to 5). For a meaningful comparison, it may be assumed that the comparative specimen (9) had the same visible physical characteristics and only differed from the other specimens in that it was moulded from a different chemical material. The measured amounts of
warping thus may be taken as indicating a relative improvement with respect to the amount of warping under the specified environmental conditions when materials as in specimens (1) to (8) were used. The visible physical characteristics, ie features of size, shape and configuration, as distinguished from the chemical design features, will be referred to in the following as the "specific form".

5. Even if one accepted that these values of warping not only apply to the compositions having the relative amounts of the components actually used for moulding the cartridge cases in the test specimens, but to whole sub-classes of the materials listed in Table 3 which could be selected by simple trial and error, these numerical values would nevertheless be connected with the specific form of the cartridge cases used, in particular dimensional characteristics such as thickness of the walls, arrangement of ribs and notches, etc (cf Figures 1 and 15), which would at least have an influence on the amount of warping expressed in hundredths of millimetres.

6. Therefore, the person skilled in the art would not directly and unambiguously derive from the application as filed that these numerical values, independently of the specific form of the cartridge cases, are disclosed as essential features for selecting suitable moulding compositions. Rather, these values are presented as the result of comparative tests carried out with specific cartridge cases moulded from specific compositions. In such tests, both the specific form of the cartridge cases and the relative amounts of the components of the materials would have an influence on the measured values. Claim 1 combines these numerical values with
cartridge cases which may be different in form including their size ("3.5 inch or smaller") from those on which the tests were carried out. Therefore, the increased amount of warping of a cartridge case as specified in claim 1 of both requests adds subject-matter which extends beyond the content of the application as filed and thus infringes Article 123(2) EPC.

7. For the reasons already set out above, in particular the dependency of these numerical values on the specific form, the amount of warping as specified in the claims is not clear as a criterion for characterising sub-classes of the moulding materials, so that these claims do not comply with the requirements of Article 84 EPC. The specific form of the cartridge cases, even if their diameter were limited to 3.5 inch cartridge cases, is not clearly defined to the extent that the specified degree of warping expressed in hundredths of millimetres would depend only on a suitable modification of the specified chemical compositions.

8. The appellant had already been informed by the Board's communication which was annexed to the summons to oral proceedings that the Board, for the above reasons, considered claims reciting the above-discussed feature to be unallowable. The limitation of claim 1 to four moulding materials (main request), or to only one moulding material (auxiliary request), does not change the reasons leading to the refusal of this application because the subject-matter of the amended claims still combines the values of the increased amount of warping which were disclosed in the context of specific cartridge cases (specimens (1) to (8)) with cartridge
cases which may have different specific forms. The person skilled in the art would expect these cartridge cases to warp under the specified test conditions by an amount which would depend \textit{inter alia} on the different specific forms, and there is no disclosure in the application as filed that the specific values of warping measured in the tests were suitable for selecting sub-classes of moulding materials.

**Order**

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

The appeal is dismissed.

The Registrar

The Chairman

M. Hörnell

W. J. L. Wheeler