

Internal distribution code:

- (A) Publication in OJ
(B) To Chairmen and Members
(C) To Chairmen
(D) No distribution

D E C I S I O N
of 13 June 2002

Case Number: T 0854/00 - 3.2.2
Application Number: 94108292.7
Publication Number: 0628321
IPC: A61M 5/14
Language of the proceedings: EN
Title of invention:
Flexible strip with bail for suspending containers
Patentee:
COLUMBUS s.a.s. di ZONI Silvio & C.
Opponent:
Stralfors AB
Headword:
-
Relevant legal provisions:
EPC Art. 56
Keyword:
"Inventive step (yes)"
Decisions cited:
-

Catchword:
-



Case Number: T 0854/00 - 3.2.2

D E C I S I O N
of the Technical Board of Appeal 3.2.2
of 13 June 2002

Appellant: Stralfors AB
(Opponent) Langgatan 21
SE-341 84 Ljungby (SE)

Representative: Wagner, Karl Heinz
H. Wagner & Co. AB
Norra Vallgatan 72
SE-211 22 Malmö (SE)

Respondent: COLUMBUS s.a.s di ZONI Silvio & C.
(Proprietor of the patent) Via Faggi, 2
I-29100 Piacenza (PC) (IT)

Representative: -

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 28 June 2000
rejecting the opposition against No. 0 628 321
pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: W. D. Weiß
Members: D. Valle
J. C. M. De Preter

Summary of Facts and Submissions

I. The appellant (opponent) filed an appeal against the decision of the Opposition Division to reject the opposition.

II. The patent was opposed for lack of novelty and inventive step on the basis of documents:

D1: EP-A-0 386 753

D2: US-A-4 269 322

D3: US-A-4 699 973

D4: US-A-4 431 705.

Together with the Statement of Grounds the appellant filed the additional document:

D5: "Lexikon i Kemi", page 284.

With letter of 20 March 2001 the appellant referred additionally to the document:

D6: EP-B-99 376, cited in the patent in suit.

III. The appellant requested that the decision under appeal be set aside and the patent revoked for lack of inventive step.

The respondent (patent proprietor) requested that the patent be maintained.

IV. Claim 1 as granted reads as follows:

"1. In combination a container to be suspended from a support with its mouth facing downwards for use, a structure consisting of a flexible strip of polyamide material in the form of self-adhesive label applicable to the outer surface of said container (7) comprising a profiled cut (3) which separates a main part (1) of said flexible strip from a narrower portion (2), said cut (3) having its ends lying on the diameter of the container, the narrower portion (2) is provided with a pullable outwardly extending portion characterized in that the narrower portion (2), under traction of said outwardly extending portion (5), is deformable and elongatable to at least three times the original length before its breakage to form a bail structure for the vertical suspension of the container".

V. The appellant argued as follows:

Starting from document D1 - it was quite obvious to provide the narrower portion with a pullable portion being such feature a well known feature in many technical fields, particularly in the packaging industry see also document D6, column 10, lines 23 to 29. Also the feature of making the narrower portion of the label deformable as defined was a measure lying close at hand for a skilled person. The problem to be solved was to damp any knock or jolt against the container which was known from document D2 (see abstract, lines 7 to 10, column 2, lines 11 to 18 and claim 1). The patent in suit suggested nylon 6 as preferred material for the flexible strip (column 3, lines 26 to 28; column 4, line 52 to 54 and dependent claim 5). Nylon was a polyamide material and it was cited in document D1 as a preferred material for the

flexible strip. Furthermore document D3, column 5, examples 9 to 14 and lines 37 to 38; column 4, lines 44 to 47, disclosed using ϵ -caprolactam to produce polyamide resins (such as nylon 6) for obtaining non-stretched films which could be stretched three times lengthwise, see also document D4. Finally, the dictionary D5 disclosed using ϵ -caprolactam to produce nylon 6. Thus it was obvious that the person skilled in the art would have no difficulty in finding an appropriate material, such as nylon 6, for the handle portion.

VI. The respondent presented the following arguments.

None of the cited documents disclosed a narrower portion of the label deformable and elongatable at room temperature. Documents D3 and D4 disclosed processes for obtaining polyamides which were prestretched at high temperature and which were not necessarily elongatable at room temperature. Document D2 disclosed also a bail made of prestretched polyester material. In document D3 the nylon film was stretched at high temperatures to reduce its elongability and deformability. The invention did not use prestretched polyamides. None of the cited documents disclosed that the narrower portion was provided with a pullable outwardly extending portion.

Reasons for the Decision

1. The appeal is admissible.
2. *Novelty*

Novelty has not been challenged in the appeal proceedings.

3. *Inventive step*

3.1 Document D1 is acknowledged in the description of the patent in suit (see column 2, lines 17 to 19) and the Board is in agreement with the parties that the device disclosed therein reflects the combination of features set out in the preamble of claim 1 but not those in its characterising portion.

The handle portion of this known device is made of a strip of strong, reinforced material, preferably of a laminate.

According to the patent in suit (see column 2, lines 23 to 48), this known device suffers from three drawbacks:

- (i) Due to its particular construction, the handle portion, when in its storage position, can be gripped only by inserting a fingernail between it and the container with the result that often the handle portion breaks.
- (ii) Due to its very strong and rigid structure, the handle portion can be moved into the use position only with difficulty.
- (iii) The most serious drawback deriving from the total or substantial rigidity of the handle portion consists in that when a medical drip bottle is suspended from this known rigid bail structure an inadvertent knock against the bottle or its support may entail a damage which interrupts the delivery of the bottle content to the patient.

3.2 The technical problem underlying the patent in suit consists in removing these drawbacks. This problem is solved by the patent in suit in that:

- (A) the narrower portion is provided with a pullable outwardly extending portion, and in that,
- (B) under traction of said outwardly extending portion, such narrower portion is deformable and elongatable to at least three times the original length before its breakage.

Feature (A) provides for the easy grip of the narrow portion from the storage position (see EP-B- column 3, lines 11 to 14).

Feature (B) has the effect that the bail when adequately dimensioned with respect to the bottle weight, can be easily and considerably elongated even as result of a relatively small pull. In this manner, after the container has been suspended from a support hook by the handle portion, which has undergone only a part of its possible elongation, any knock or jolt against the container easily causes further elongation (without breakage) of the handle portion, with a consequent damping effect which prevents damage to the container and to the part connected to it (see EP-B-0 628 321, the paragraph bridging columns 2 and 3) and, therefore, harm to a patient. Additionally, the increased flexibility of the material facilitates the lift of the handle portion from its storage position to its use position (see EP-B-0 628 321, column 3, lines 5 to 10).

3.3 It is true that document D2 discloses a container to be suspended from a support by a bail comprising a strip of a polyester material which strip has a certain residual stretching ability to cushion shock applied centrally to the container (see Abstract). In order to restrict its notch sensitivity the polyester material is uniaxially stretched. The bails made according to the teaching of this document have an elongation at

failure of between 46 to 170%, hence far below that required by claim 1 of the patent in suit. Moreover, the end portions of the strip forming this known bail are fixed to the container by a pressure-sensitive tape which encircles the container (see document D2, claim 1). Consequently this known bail is always in the operating position. It is therefore of another type as the one of the patent in suit which is integral part of the bottle label in its storage position and has to be brought to an adequate position before use, which change of position entails the problems arising from the drawbacks (i) to (iii) enumerated above.

Even if the person skilled in the art followed nevertheless the path suggested by the appellant and exchanged the reinforced material of the label disclosed in document D1 with the polyester material forming the bail disclosed in document D2, he would arrive at a bail construction made of a material different from and having an elongation at breakage inferior to that required by the features of claim 1 of the patent in suit.

3.4 It has never been denied that the polyamide materials, at the priority date of the patent in suit, were marketed with innumerable combinations of mechanical characteristics including the one which is used for the label and bail construction according to claim 1. If this had not been the case, the patent would not have disclosed the invention clear and complete enough for it to be carried out by person skilled in the art (Article 100(b) EPC). Therefore documents D3 to D6 need not have to be cited to prove this well known fact. These documents also demonstrate that the elongation before breaking of a material depends strongly on the degree of pre stretching which has been applied to the material and that in particular polyamide materials are normally delivered in a prestretched condition.

Therefore also the mentioning of polyamide in D1 cannot suggest generally a material exhibiting an elongation value belonging to an essentially unstretched condition. But all these documents do not provide any reason why a person skilled in the art would have selected a polyamide material with the combination of mechanical features required by claim 1 to make the particular bail construction therefrom.

3.5 For these reasons, the subject-matter of claim 1 involves an inventive step.

Order

For these reasons it is decided that:

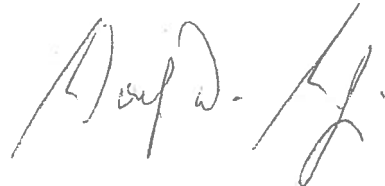
The appeal is dismissed.

The Registrar:



V. Commare

The Chairman:



W. D. Weiß

