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D E C I S I O N
of 18 December 2003

Case Number: T 0083/03 - 3.2.7

Application Number: 00830493.3

Publication Number: 1070669

IPC: B65D 17/34

Language of the proceedings: EN

Title of invention:

Beverage can with a protective film and heat-sealing apparatus
therefore

Applicant:

ECOCAP'S S.r.l.

Opponent:

-

Headword:

-

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step - (no)"

Decisions cited:

-

Catchword:

-



Case Number: T 0083/03 - 3.2.7

D E C I S I O N
of the Technical Board of Appeal 3.2.7
of 18 December 2003

Appellant: ECOCAP'S S.r.l.
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 12 July 2002
refusing European application No. 00830493.3
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: A. Burkhart
Members: P. A. O'Reilly
C. Holtz

Summary of Facts and Submissions

I. The appellant (applicant) filed an appeal against the decision of the Examining Division to refuse the European application No. 00 830 493.3.

II. The application was refused by the Examining Division for lack of inventive step.

The most relevant prior art document for the present decision is:

D2: US-A-4 927 048

III. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of claim 1 filed on 18 March 2002 before the Examining Division.

IV. Claim 1 of the application reads as follows:

"1. Can with anti-dust and anti-tamper protection device including a prefabricated blank disk (8) that covers the top part of the can and where the pull-tab (11) for opening it is formed, which may be placed by an automated process on the cans taken from the main packaging line (1), distinguished by the fact that the hygienic and anti-tamper protection device (8) consists of a "matched" sheet of a single material, the upper surface (8') of which is made of aluminium or thermal paper, with ideal heat conducting properties, whereas the bottom part (8'') consists of a lacquer coating (hot-melt lacquer seal), adhesively compatible with the aluminium of the can rim (9), to which it adheres

thanks to the hot-melting of the lacquer caused by the heat and pressure applied by the punch (3), suitably heated in the parts coming into contact."

V. The appellant argued essentially as follows:

The main difference between the subject-matter of claim 1 and the prior art lies in the heat-sealing material which is a special lacquer that may be heat-sealed on aluminium cans. Also, in the prior art device the covering disk consists of two distinct layers, i.e. a layer of aluminium superimposed upon a polymeric material whereas according to claim 1 there is a single layer of aluminium with heat-sealing aluminium applied to the bottom. The lacquer is completely eliminable in an oven without leaving residues, unlike the polymer layer of the prior art. The lacquered cans can be withdrawn from a magazine at high speed which is not possible with traditional cans since the polymer layer causes a considerable degree of adhesion between the layers.

VI. In a communication, the Board set out their provisional opinion that the subject-matter of claim 1 did not appear to involve an inventive step. In the response to the communication the appellant filed arguments.

Reasons for the Decision

1. *Inventive step*

1.1 Closest prior art

The closest prior art is represented by document D2 which discloses:

a can (10) with anti-dust and anti-tamper protection device including a prefabricated blank disk (17) that covers the top part of the can and where the pull-tab (13) for opening it is formed, which may be placed by an automated process on the cans taken from the main packaging line (such operations always take place on in an automated process), wherein the hygienic and anti-tamper protection device (17) consists of a matched sheet of a single material, the upper surface (18) of which is made of aluminium (see column 2, lines 49 to 52), with ideal heat conducting properties, whereas the bottom part (25) consists of a polymeric coating, adhesively compatible with the aluminium of the can rim (see column 3, lines 19 to 22), to which it adheres thanks to the hot-melting of the polymeric material.

1.2 Problem to be solved

The objective problem to be solved by the distinguishing feature is to select a suitable polymer or equivalent for the adhesion to the can.

1.3 Solution to the problem

The solution to the problem is the provision of a lacquer coating.

1.4 The solution to the problem is obvious for the following reasons:

A lacquer is a resinous, i.e. essentially polymeric, varnish. Lacquer is well-known for its adhesive properties. Therefore the skilled person looking for an adhesive polymer or equivalent would consider lacquer as a suitable material. The only properties of the lacquer which are mentioned in the application as filed are that it should be adhesively compatible with the aluminium of the can and that the adhesion occurs at the melting temperature of the lacquer. These two properties however are necessary in order that a lacquer can be employed. It is clear that the lacquer must be compatible with the aluminium of the can as otherwise it will not work. The prior art coating is described as hot-melt (see column 3, lines 13 to 16) so that also in the prior art the adhesion occurs when melting.

In the view of the appellant the prior art device discloses two distinct layers whereas according to claim 1 there is a single layer with lacquer applied to the bottom. The Board cannot agree with this distinction. It is specified in document D2 that the underside of the aluminium foil is coated with a polymeric material (see column 2, lines 58 to 61). According to claim 1 there is specified a lacquer "coating" and in document D2 it is disclosed that the underside is "coated". The Board cannot therefore see any difference between the disclosure of document D2 and the feature of claim 1 in this respect.

The appellant has also argued that the lacquer leaves no residues after heating and that the lacquered cans can be withdrawn at high speed from the magazine in which they are stacked. The appellant argued that the

prior art coating did not have these advantages. The lacquer as disclosed and claimed however has no features corresponding to these alleged advantages. Moreover, no features corresponding to these advantages were disclosed in the application as filed. The argument of the appellant regarding the polymer layer in the prior art causing friction cannot be followed since in the prior art, like application in suit, an exterior aluminium foil layer and an interior polymer layer is provided. The polymer layers on adjacent cans do not therefore come into mutual contact. The Board therefore concludes that no advantage can be derived from the subject-matter of claim 1 of the application.

In claim 1 reference is further made to the manner in which the hot melting is caused, i.e. by heat and pressure caused by a heated punch. These references do not however define further features of the claimed can *per se*, nor do they result in further features of the device. These references cannot therefore be considered when considering inventive step for the subject-matter of claim 1, quite apart from the fact that they represent a standard manner of producing a hot-melt.

The Board therefore concludes that the provision of the distinguishing feature of claim 1 is obvious for the person skilled in the art.

- 1.5 Therefore, the subject-matter of claim 1 of the only request does not involve an inventive step in the sense of Article 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

D. Spigarelli

A. Burkhart