

Internal distribution code:

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

**Datasheet for the decision
of 9 February 2011**

Case Number: T 0308/09 - 3.2.07

Application Number: 00992340.0

Publication Number: 1237788

IPC: B65D 1/00

Language of the proceedings: EN

Title of invention:
Tamper-evident drum closure overcap

Patentee:
Rieke Corporation

Opponent:
Schütz GmbH & Co. KGaA

Headword:
-

Relevant legal provisions:
EPC Art. 56

Relevant legal provisions (EPC 1973):
-

Keyword:
"Inventive step (all requests): no"

Decisions cited:
T 0967/97, T 0710/97, T 0021/08

Catchword:
-



Case Number: T 0308/09 - 3.2.07

DECISION
of the Technical Board of Appeal 3.2.07
of 9 February 2011

Appellant:
(Patent Proprietor) Rieke Corporation
500 West Seventh Street
Auburn
Indiana 46706-2095 (US)

Representative: Williams, Michael Ian
Cleveland
40-43 Chancery Lane
London WC2A 1JQ (GB)

Respondent:
(Opponent) Schütz GmbH & Co. KGaA
Schützstraße
D-56242 Selters (DE)

Representative: Pürckhauer, Rolf
Patentanwalt
Dipl.-Ing. R. Pürckhauer
Am Rosenwald 25
D-57234 Wilnsdorf (DE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
26 January 2009 concerning maintenance of the
European patent No. 1237788 in amended form.

Composition of the Board:

Chairman: H. Meinders
Members: K. Poalas
E. Dufrasne

Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the interlocutory decision of the Opposition Division rejecting the patent proprietor's main and first auxiliary request and finding that the European patent No. 1 237 788 in amended form according to the second auxiliary request meets the requirements of EPC.

The opponent filed also an appeal which, however, was withdrawn on 25 May 2009.

II. Opposition had been filed against the patent as a whole based on Article 100(a) EPC (lack of novelty).

The Opposition Division found that the subject-matter of claim 1 of the patent as granted and according to the first auxiliary request filed during the oral proceedings before the Opposition Division was not novel over D1 (US-A-4 775 063) and that the patent with the subject-matter of independent claims 1 and 2 according to the second auxiliary request filed during the same oral proceedings met the requirements of the EPC.

III. Oral proceedings before the Board took place on 9 February 2011. The respondent (opponent) did not attend the oral proceedings, as announced with letter of 14 December 2010. According to Rule 115(2) EPC and Rule 15(3) RPBA, proceedings were continued without said party.

The appellant requested that the decision under appeal be set aside and the patent be maintained as granted

(main request) or that the patent be maintained according to the first auxiliary request filed at the oral proceedings before the Opposition Division on 15 January 2009.

The opponent, having withdrawn its own appeal, therefore being respondent, submitted no requests.

IV. The independent claims 1 according to the main and to the first auxiliary request (amendments when compared to claim 1 of the main request are depicted in bold or struck through) read as follows:

Main request (claim 1 of the patent as granted):

"A unitary, plastic, snap-on overcap (20; 70) for providing a tamper-evident capability to a closure assembly of a container, said overcap comprising: a cap (21; 71) arranged to be snapped onto said closure assembly, the cap including a depending sidewall (26; 75)

a removable skirt (22; 72) including a wall portion (29; 72) constructed and arranged to be positioned adjacent to an upper surface of said container when said cap is snapped onto said closure assembly; and

a plurality of spaced-apart frangible elements (23; 73) connecting together said removable skirt and said cap, such that severing of said plurality of spaced-apart frangible elements enables the separation of said removable skirt from said cap, characterized in that:

said depending sidewall (26; 75) terminates at its lower end in a continuous annular snap-on lip portion (27; 78), said lip portion being constructed and

arranged for engaging a portion of said closure assembly, and said removable skirt (22; 72) is located radially outwards of said lip portion (27; 78) and overlaps said lip portion".

First auxiliary request

"A **tamper-evident** unitary, plastic, snap-on overcap (20; 70) ~~for~~ providing a tamper-evident capability to a closure assembly of a container, said overcap comprising:

a cap (21; 71) arranged to be snapped onto said closure assembly, the cap including a depending sidewall (26; 75)

a removable skirt (22; 75) including a wall portion (29; 72) constructed and arranged to be positioned adjacent to an upper surface of said container when said cap is snapped onto said closure assembly; and

a plurality of spaced-apart frangible elements (23; 73) connecting together said removable skirt and said cap, such that severing of said plurality of spaced-apart frangible elements enables the separation of said removable skirt from said cap,

wherein the overcap is unable to be pried free without cutting or tearing away the snapped on cap or without removal of the skirt so that the cap can be pried off, in order to provide a visible indication of a tampering attempt;

characterized in that:

said depending sidewall (26; 75) terminates at its lower end in a continuous annular snap-on lip portion (27; 78), said lip portion being constructed and arranged for engaging a portion of said closure assembly, and said removable skirt (22; 72) is located

radially outwards of said lip portion (27; 78) and overlaps said lip portion".

V. The appellant argued essentially as follows:

Main request

The term "tamper-evident" used in claim 1 is a term of the art, meaning "designed to make obvious any improper interference with the contents". By contrast, D1 relates to a lid for an aerosol can. Such a lid is designed to be snapped on and removed from the aerosol can many times without any recognisable damage.

If D1 were to provide a tamper-evident capability, then it would mean that the perforated junction 6 must necessarily be broken before the cap could be removed from the aerosol can. However, this is not the case. It is clear that the lid can be removed from the can without breaking the perforated junction (see column 2, lines 30 to 35).

Therefore D1 does not disclose an overcap for providing a tamper-evident capability to a closure assembly of a container.

The term "closure assembly" in claim 1 has to be read by the person skilled in the art in the light of the whole disclosure of D1. In D1, the cap is arranged to be snapped onto the outer edge of the aerosol can. The outer edge of the can is not a closure assembly, and is certainly not a closure assembly for which a tamper-evident capability is provided. Only the valve on the top surface of D1 can be seen as the "closure assembly".

Thus D1 does not disclose a cap which is arranged to snap onto a closure assembly for which a tamper-evident capability is provided.

The flange 9 on the base 5 of the cap disclosed in D1 is bevelled on both sides, so that it can easily slip on and off the rim of the top of the can (see Figures 1 and 3). Such an arrangement is necessary in order to allow the base to be removed from the top of the aerosol can, so that it can subsequently be removed from the cap and placed on the bottom of the can. Thus the flange 9 is not designed to provide a "strong hold" on the aerosol can which assures evidence of tampering by keeping the base on the can while the cap is removed.

Even if D1 were considered to disclose implicitly an upper disc and to disclose implicitly that the flange 9 snaps onto such an upper disc, it is clear that such an upper disc is not a "closure assembly" as claimed.

As regards inventive step: D1 cannot be seen as the closest prior art, as it does not relate to the same purpose to provide a tamper-evident capability. Even if it were considered as such, the skilled person would not modify it, as there is no incentive in D1 to provide tamper-evidence to the lid of the spraying can.

First auxiliary request

D1 does not render to the man skilled in the art obvious the provision of a tamper-evident overcap which is unable to be pried free without cutting or tearing

away the snapped on cap or without removal of the skirt so that the cap can be pried off.

VI. The respondent submitted no arguments.

VII. At the oral proceedings, inventive step in the subject-matter of both requests was discussed, starting from D1 as feasible closest prior art.

Reasons for the decision

1. *Main request - Claim 1 - Inventive step, Article 56 EPC*

The Board accepts that the overcap of claim 1 is novel over the disclosure in D1.

1.1 The appellant argues that the overcap claimed in claim 1 differs from the lid known from D1 in that
a) said lid does not provide tamper-evidence, and in that
b) no "closure assembly" onto which the cap is snapped is known from D1.

1.2 The Board follows the appellant's arguments in so far as that it is the embodiment shown in Figures 1 to 3 of D1 which is of relevance to the present invention and further that in this embodiment the lid 2 consists of a cap 4 and a base 5. Further, the cap 4 has a flange 7 to engage the inner lip 8 of the can, and the base 5 fixed to cap 4 with a perforated junction 6 has a flange 9 to engage the outer lip 10 present on the can. In this embodiment, either the flange 7 or flange 9 can secure the lid 2 to the can (see column 2, lines 16

to 18). In use, the lid 2 is removed in its entirety from the can, and the base 5 is detached from the cap 4. Once detached, the cap 4 can be snapped onto the inner lip 8, and the base 5 can be snapped onto the bottom of the can (see column 2, lines 30 to 35). It is nowhere stated in D1 that the lid 2 cannot be removed from the can without breaking the perforated junction between cap 4 and base 5. The Board follows therefore the appellant's argument that in the arrangement of D1 it is possible to remove the lid 2 and access the content of the aerosol can without this being evident and that accordingly the lid known from D1 does not provide tamper-evidence.

1.3 The Board cannot follow, however, the appellant's argument that a "closure assembly" onto which the cap is snapped as claimed in claim 1 is not known from D1, for the following reasons:

1.3.1 According to the appellant a "closure assembly for a container" is an assembly, i.e. an object consisting of at least two items, allowing the user to access the content of the container.

The Board establishes that the aerosol container as shown in figures 1 to 3 of D1 consists of the cylindrical part of the can 3, its cascaded top cover having the lips 10 and 8 (the former fixing the cover to the cylindrical part of the can) and the valve provided in said cover, whereby the valve consists of a small vertical tube and the usual activating nozzle. Due to the fact that the valve is connected to the top cover of the can the user can operate said valve gaining thereby access to the content of the container.

Accordingly, the Board following the above mentioned appellant's definition of a "closure assembly for a container" considers that the cascaded top cover having the lips 10 and 8 together with the valve is the "closure assembly" of the container of D1.

Appellant's interpretation of the "closure assembly" being limited to only the valve is therefore also not considered valid. As a result, the lid 2 is arranged to be snapped onto this closure assembly, as claimed, because it snaps onto lip 10 which is a portion of this closure assembly.

- 1.3.2 The appellant argued that the person skilled in the art would not consider that a "closure assembly for a container" as envisaged by the patent is present in the aerosol can of D1.

It referred in this respect to figures 6 and 11 showing that the closure assembly of the patent was constituted by flange 40 on plug 39 cooperating with fitting 43 and plug 86 cooperating in the same manner with fitting 82.

The Board notes in this respect that the wording of claim 1 is clear and that therefore there is no need for a more limited interpretation of its subject-matter, in the light of the description. Since this particular form of the closure assembly is explicitly claimed in the dependent claims 5 and 6, it is also clear that claim 1 is not limited to overcaps for closure assemblies having internally-threaded fittings in combination with threaded plugs but encompasses any kind of closure assemblies for containers.

1.3.3 In view of the above the Board finds that the overcap according to claim 1 differs from the lid known from D1 only in that it is for providing a tamper-evident capability to the closure assembly.

1.4 The appellant argued that D1 could not be considered the closest prior art for the discussion of inventive step as it did not relate to the same purpose or effect as the overcap of claim 1, i.e. providing tamper-evidence.

1.4.1 The appellant is correct in citing the case law of the Boards of Appeal in this respect, is however selective in its citation, as the case law also defines the closest prior art being "that combination of features which constitutes the most promising starting point for an obvious development leading to the invention", or "it should at least have a similarity of the technical problem".

The Board concurs with the conclusion arrived at in T 967/97 (of 25 October 2001, not published in OJ EPO, reasons point 3.2) that there is not necessarily only "one closest prior art" document. If there are more workable routes, i.e. routes starting from different documents, which may lead to the invention, the rationale of the problem-solution approach requires an examination of the invention in respect of all these workable routes, before inventive step can be acknowledged. Correspondingly, if one of these workable routes shows the invention is obvious, the presence of inventive step is to be denied. See also T 21/08 of 2 September 2010 and T 710/97 of 25 October 2000, reasons point 3.2.1 (both not published in the OJ EPO).

- 1.4.2 Therefore, it needs to be assessed whether D1 is a feasible starting point for assessing inventive step.

The Board is of the opinion that it is, for the following reasons:

The patent itself mentions D1 as very relevant prior art in the technical field of the invention, see paragraph [0005].

The risk of tampering with the contents exists just as well with spray cans as in D1 as with containers in general (as claimed). No customer wishes to buy a spray can which has already been used, even to a minimal extent.

Adapting D1 to provide tamper-evidence requires minimal modifications, as is discussed below.

- 1.4.3 D1, column 2, lines 28-32 states that it is advantageous that cap 4 and base 5 of the lid 2 are a single unit, to be joined as such to the can. After purchase the customer could easily detach base 5 from cap 4 along perforated junction.

The Board assumes, in favour of the appellant, that to be able to detach the base 5 from the cap 4 the lid 2 is first detached from the can as a single unit, after which the perforations 6 are severed one way or the other.

Considering it differently, i.e. that it would be possible to detach first the cap from the can while the base remains on the can, to be detached therefrom

subsequently by liberating flange 9 from lip 10 upwardly, would mean that there is evidence of tampering as in this manner somebody could have access to the actuating nozzle, leading immediately to a novelty objection based on D1, to the detriment of the appellant.

To be able to achieve the procedure as suggested by the appellant the relative strength of the perforations 6 with respect to the holding strength of flange 9 on lip 10 and flange 7 on lip 8 is the determining factor in designing the cap and base of the can disclosed in D1. The perforations need to be strong enough to have the cap move together with the base as a unit, whether the unit is freed from the can by manipulating the cap or by pushing it off the can from below, by manipulating the base. In both cases the cap's flange 7 needs to be freed from lip 8.

- 1.4.4 Following the appellant's argument, it is also clear that the can and cap disclosed in D1 as mentioned above, do not have a tamper-evident capability, as it allows to take off the cap and base as a unit, which according to column 2, lines 28-30 can be put back onto the can also as a unit, thus leaving no trace that access was had to the actuating nozzle.

The definition of the problem to be solved is therefore to provide tamper-evident capability to the spraying can disclosed in D1.

- 1.4.5 Presented with the need to provide tamper evidence capability to the lid of the can disclosed in D1, the skilled person - who already had to decide on the

relative strength of the perforations with respect to the holding strength of flanges 7 and 9 of the cap, respectively the base - does not need other skills than those already available to him to alter the relative strength of the perforations with respect to the holding strengths of the flanges 7 and 9, so that both ways to free the lid from the can of D1 lead to the breaking of the perforations before the cap is freed from the closure assembly. This requires no exercise of inventive skills.

- 1.5 The appellant argued that in the case that the base has to be firmly connected to the can, so that the perforated junction 6 is first broken, it would be almost impossible for the user to remove the base from the can, because said base would have to be very tightly connected to the can. It was further argued that according to figures 1 and 3 of D1 the flange 9 is bevelled on both sides, which means that it is not designed to provide a "strong hold" on the can.

The Board cannot follow these arguments since it is not the degree of tightness which defines which part is separated first, the perforated junction 6, flange 7 from lip 8 or flange 9 from outer lip 10, but it is merely the relative difference between the force needed for breaking the perforated junction 6 and the force needed to free the engagement between flanges 7 and 9 and their respective lips 8 and 10.

- 1.6 For the above mentioned reasons the subject-matter of claim 1 according to the main request does not involve an inventive step and as a consequence the requirements of Article 56 EPC are not met.

2. *First auxiliary request - Claim 1 - Inventive step, Article 56 EPC*

2.1 The overcap according to claim 1 of the first auxiliary request differs from the overcap according to claim 1 of the main request in that it is defined as now providing itself "tamper-evident capability" (instead of the "for"-terminology) and in that said overcap is "unable to be pried free without cutting or tearing away the snapped on cap or without removal of the skirt so that the cap can be pried off, in order to provide a visible indication of a tampering attempt".

2.2 As is stated above for the main request the provision of tamper-evidence capability "for" the lid, i.e. the cap known from D1, by modifying the cap as discussed does not involve an inventive step. As a result said cap is then per se an overcap providing a "tamper-evident capability". Therefore, the first amendment cannot contribute to inventive step.

2.3 The second additional feature only describes what happens when a user tries for the first time to separate the lid according to the non-inventive modification as discussed under point 1.4 above. Other than that this does not involve any further features, so cannot contribute to inventive step either.

2.4 For the above-mentioned reasons, the subject-matter of claim 1 of the first auxiliary request does not involve an inventive step with the result that it does not meet the requirements of Article 56 EPC either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Nachtigall

H. Meinders