

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen

D E C I S I O N
of 8 December 2000

Case Number: T 0265/99 - 3.2.1
Application Number: 92870145.7
Publication Number: 0591601
IPC: B65D 47/20, B65D 47/06,
B65D 47/26

Language of the proceedings: EN

Title of invention:

Squirt dispenser for toilet bowl cleaner with improved coverage under the toilet bowl rim

Patentee:

The Procter & Gamble Company

Opponent:

Henkel KGaA

Headword:

-

Relevant legal provisions:

EPC Art. 54, 56

Keyword:

"Novelty (yes)"
"Inventive step (no)"

Decisions cited:

T 0095/83, T 0153/85, T 0402/89

Catchword:

-



Case Number: T 0265/99 - 3.2.1

D E C I S I O N
of the Technical Board of Appeal 3.2.1
of 8 December 2000

Appellant: Henkel KGaA
(Opponent) Henkelstrasse 67
D-40589 Düsseldorf (DE)

Representative: Sparing, Rolf Klaus
Bonnekamp & Sparing
Patentanwaltskanzlei
European Patent & Trade Mark Law Firm
Postfach 32 10 20
D-40425 Düsseldorf (DE)

Respondent: The Procter & Gamble Company
(Proprietor of the patent) One Procter & Gamble Plaza
Cincinnati
Ohio 45202 (US)

Representative: Canonici, Jean-Jacques
Procter & Gamble European Technical Center N.V.
Temselaan 100
BE-1853 Strombeek-Bever (BE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 20 January 1999
rejecting the opposition filed against European
patent No. 0 591 601 pursuant to Article 102(2)
EPC.

Composition of the Board:

Chairman: F. Gumbel
Members: S. Crane
J. Willems

Summary of Facts and Submissions

I. European patent No. 0 591 601 was granted on 5 June 1996 on the basis of European patent application No. 92 870 145.7.

Claim 1 of the granted patent reads as follows:

"A squeezable, liquid container (1) for delivering liquid in a delivery-direction (50) which is not parallel to the container main axis (55), said container (1) composing:

- a body portion (2) for containing said liquid, said body portion (2) being flexible to reduce the inside volume upon squeezing and said body portion (2) retracting to its relaxed shape upon releasing the squeezing;
- a neck portion (20) comprising a discharge orifice (13) and providing a liquid communication from said body portion (2) to said discharge orifice (13), said neck portion (20) being directed or being directable to squirt out liquid in said delivery-direction (50);

and said container being characterized in that it further comprises a self seal valve (3) closing said discharge orifice (13)."

Dependent claims 2 to 8 relate to preferred embodiments of the container defined in claim 1.

Claim 9 is worded as follows:

"A liquid containing container system characterized in that it comprises

- the container (1) of any of the claims 1 to 8; and
- a liquid in said container (1) having a thixotropic, non-Newtonian viscosity behaviour of reducing viscosity with increased shear rate."

Claim 10 is dependent on claim 9 and specifies that the liquid is a toilet bowl cleaner.

II. The granted patent was opposed by the present appellants on the grounds that its subject-matter lacked novelty and/or inventive step (Article 100(a) EPC).

Of the prior art documents relied upon in the opposition proceedings only the following played any significant role on appeal:

(D1) EP-A-0 144 104

(D3) EP-A-0 160 336

(D4) EP-A-0 395 380

III. With its decision posted on 20 January 1999 the Opposition Division rejected the opposition.

IV. Notice of appeal against this decision was filed on 5 March 1999 and the fee for appeal paid at the same time.

The statement of grounds of appeal was received on 21 May 1999. In this statement the appellants referred additionally to the prior art document DE-A-3 121 591 (D9), which was mentioned in the description of the contested patent.

- V. With a letter of the same date received on 23 November 2000 the respondents (proprietors of the patent) submitted a new set of claims according to a first auxiliary request, claim 1 of which reads as follows:

"A squeezable, liquid container (1) for delivering a liquid toilet bowl cleaner under the toilet bowl rim, counter current gravity in a delivery-direction (50) which is not parallel to the container main axis (55), said container (1) containing a liquid toilet bowl cleaner, and comprising:

- a body portion (2) for containing said liquid, said body portion (2) being flexible to reduce the inside volume upon squeezing and said body portion (2) retracting to its relaxed shape upon releasing the squeezing;
- a neck portion (20) comprising a discharge orifice (13) and providing a liquid communication from said body portion (2) to said discharge orifice (13), said neck portion (20) being directed or being directable to squirt out liquid in said delivery-direction (50);

and said container being characterized in that it further comprises a self seal valve (3) closing said discharge orifice (13)."

- VI. Oral proceedings before the Board were held on

8 December 2000.

The appellants maintained their request for revocation of the patent in its entirety.

The respondents requested that the appeal be dismissed and the patent maintained as granted (main request) or in the alternative that the patent be maintained in amended form on the basis of the set of claims according to the first auxiliary request filed with letter of 23 November 2000 or on the basis of a set of claims according to a second auxiliary request submitted at the oral proceedings.

Claim 1 according to the second auxiliary request reads as follows:

"A process for delivering a toilet bowl cleaner under the toilet rim, counter current gravity, from a squeezable, liquid container (1) which delivers liquid in a delivery-direction (50) which is not parallel to the container main axis (55), said container (1) comprising:

- a body portion (2) for containing said liquid, said body portion (2) being flexible to reduce the inside volume upon squeezing and said body portion (2) retracting to its relaxed shape upon releasing the squeezing;
- a neck portion (20) comprising a discharge orifice (13) and providing a liquid communication from said body portion (2) to said discharge orifice (13), said neck portion (20) being directed or being directable to squirt out liquid in said delivery-direction (50);

characterized in that said container further comprises a self seal valve (3) closing said discharge orifice (13)."

VII. The arguments put forward by the appellants can be summarized as follows:

The requirement in claim 1 of the main request that the liquid delivery direction not be parallel to the container main axis was so broad in ambit that it could not distinguish from the particular embodiment of Figure 5 of document D4 or the general disclosures in the same document relating to the various shapes and forms of container to which the invention portrayed there could be applied. The subject-matter of this claim therefore lacked novelty.

If novelty were, however, to be recognised then the subject-matter of the claim would in any case lack inventive step. The provision of a self-seal valve to close the discharge orifice of a squeezable liquid container in order to prevent inadvertent discharge of the liquid was taught by both documents D3 and D4. The specific type of valve disclosed in these documents namely a slit elastomeric disc, corresponded to that used in the preferred embodiments of the claimed invention. Having regard to documents D3 and D4 it was obvious to include a self-seal valve in the angled jet discharge containers of documents D1 or D9, neither of which were equipped with means for preventing inadvertent discharge. It would also be evident to the person skilled in the art that the provision of the type of self-seal valve involved could increase the velocity of the liquid when it was discharged, as a result of the higher pressure needed to open the seal.

Since both documents D1 and D9 were specifically directed to containers for liquid toilet bowl cleaner, it could not be seen how any different conclusion as to inventive step could be reached with respect to claim 1 of the first auxiliary request.

Claim 1 of the second auxiliary request offended against Article 123(3) EPC and should not be admitted for this reason alone. In any case exactly the same considerations as to obviousness applied.

VIII. In reply the respondents argued substantially as follows:

The requirement of claim 1 of the main request that the liquid delivery direction and the main axis of the container should be not be parallel was perfectly clear when read in its context. The requirement was not met in any of the containers specifically or generally disclosed in document D4. The subject-matter of the claim was therefore novel.

It also involved an inventive step. There were many conceivable ways for preventing inadvertent discharge of liquid from a squeezable container and nothing in the art could point the skilled person to adopt the particular means disclosed in documents D3 and D4 with a container such as shown in documents D1 or D9. Indeed, the Opposition Division had correctly found that document D1 pointed away from the claimed combination since it already included means for dealing with the problem involved which was more complex than those of the invention.

In any case, the true technical problem which the

invention set out to solve was not the prevention of inadvertent discharge, but how to achieve a more forceful discharge. Obtaining a high discharge velocity was of particular advantage with containers for a toilet bowl cleaner, since the cleaner had to be discharged upwardly, against gravity, under the toilet bowl rim. This technical objective was not mentioned anywhere in the state of the art and was solved by providing a self-seal valve, admittedly known *per se*, for a completely different and inventive purpose. Claim 1 of the first auxiliary request had been restricted to a container for discharging toilet bowl cleaner in this manner in order to emphasise the actual goal of the invention.

This was made even more clear in claim 1 according to the second auxiliary request. This claim was intended to be understood as relating to the use of the container specified in the claim for delivering toilet bowl cleaner upwardly under the toilet bowl rim and if necessary, in view of objections under Article 123(3) EPC, could be drafted accordingly.

Reasons for the Decision

1. The appeal complies with the formal requirements of Articles 106 to 108 and Rules 1(1) and 64 EPC. It is therefore admissible.
2. *Main request*
 - 2.1 Given that squeezable containers for delivering an "angled" jet of liquid for special purposes are well known, see for example the documents D1 and D9, the

Board is of the opinion that the person skilled in the art would readily understand what is meant by the requirement of present claim 1 that the liquid delivery direction is not parallel to the main container axis. He would also immediately recognise that the containers disclosed in documents D3 and D4 are not of the required type. With regard to the embodiment of Figure 5 of document D4, on which the appellants particularly rely in this context, it can be seen that the liquid delivery direction is off-set but nevertheless parallel to the main axis of the container. As for the general statements in the description of document D4 concerning the variety of forms the container may take, there is nothing here which could be seen as constituting a specific disclosure of a container as defined in the preamble of present claim 1. The subject-matter of the claim is accordingly novel, Article 54 EPC.

- 2.2 As already indicated above the documents D1 and D9, both of which are mentioned in the introduction description of the patent specification, disclose squeezable containers according to the preamble of granted claim 1. In both cases the container, as with the preferred embodiment of the presently claimed invention, has been specifically conceived for delivering liquid toilet cleaner upwardly under the rim of a toilet bowl.

According to document D1 the upper end of the container is formed with a goose-neck shaped delivery spout, with the liquid delivery direction extending approximately at right angles to the main axis of the container. The document is specifically concerned with a problem that can arise with this configuration, namely residual

drops of liquid falling from the discharge opening and soiling the sides of the container. The document therefore proposes forming a shallow catchment area for the drops on the top surface of the main body portion of the container, underlying the discharge opening of the spout.

The container of document D9 comprises a delivery spout which first extends across the top of the main body of the container from one side thereof and at the other side is curved upwardly and inwardly to terminate in a discharge portion angled at preferably 40° to the main axis of the container. A discharge tube is mounted in the discharge portion and extends down towards the wall of the curved region of the spout. This region of the spout effectively constitutes a discharge chamber which can be filled from the container by inverting the latter before it is brought into its position of use, with its axis substantially horizontal at the level of the toilet bowl rim.

Accordingly to column 2, lines 25 to 37, of the patent specification the presently claimed invention has a number of main objectives. These are to provide a container with reduced or eliminated messiness; to allow more accurate dosing and better directed and higher squirting of the liquid; to confine the liquid inside the container even when the container is accidentally tipped over and lies on its side; to allow the user to turn the container upside down prior to discharge without the liquid starting to drip under the influence of gravity.

In accordance with granted claim 1 these objectives are realised by the provision of a self-seal valve closing

the discharge orifice. Such a valve (in the preferred embodiments described it takes the form of a slit elastomeric disc) will only open once a threshold pressure within the container is reached. In comparison with a normal container the valve therefore leads to the liquid being delivered at a relatively higher pressure and consequently velocity. The action of the valve in preventing inadvertent or premature discharge and reducing messiness is self-explanatory.

The documents D3 and D4 both relate to the provision of squeezable containers with self-seal valves in the form of a slit elastomeric discs. As stated in paragraphs 2 and 3, page 8, of document D3 the object is to permit discharge of the contents of the container when externally applied forces generate a pressure exceeding a predetermined threshold, provide spontaneous product shut off when the manually applied forces are removed and give resistance to leakage during handling. Furthermore, the self-seal valve provides a high degree of control over the amount of product dispensed. Similar considerations are mentioned in document D4. In particular, it is stated there in the penultimate paragraph of the description that the specific flow rate and sealing pressure desired for any particular package can be easily adjusted in accordance with the viscosity and other physical characteristics of the liquid being dispensed and that the valves may be provided positively to prevent the inadvertent discharge of product during transport, storage and/or other similar conditions.

In the opinion of the Board documents D3 and D4 put at the disposal of the person skilled in the art means clearly suitable for realising the objectives discussed

above with respect to the containers known from documents D1 and D9. The provision of a self-seal valve as taught by documents D3 and D4 on one of these known containers would self-evidently be effective to prevent inadvertent discharge if the container fell on to its side and also to prevent dripping and messiness as the container was being manipulated into and out of its intended position of use within the toilet bowl. Furthermore, although this effect is not specifically mentioned in documents D3 and D4 themselves, it is apparent to the skilled person that the requirement for a threshold pressure to be overcome before discharge starts will automatically result in a higher initial discharge velocity, all the factors being equal.

The Board cannot accept the argument of the respondents that document D1 teaches away from the claimed invention. That document is not in fact concerned with the prevention of unwanted liquid discharge, as suggested by the appellants; instead it merely makes a proposal to limit the soiling of the outside of the container when dripping occurs.

As a consequence of the above considerations the Board has reached the conclusion that the subject-matter of granted claim 1 is derivable in an obvious manner from the state of the art and thus lacks inventive step, Article 56 EPC.

3. *First auxiliary request*

In claim 1 of the first auxiliary request it has been specified that the container contains a liquid toilet cleaner which is to be delivered upwardly under the toilet bowl rim. It is apparent that these features,

added to the preamble of the claim, cannot provide any further distinction over the closest state of the art known from documents D1 and D9, both of those prior art containers being specifically designed for the stated purpose. In these circumstances the Board cannot see how any conclusion with respect to the inventive step of the claimed subject-matter different to that reached above with respect to granted claim 1 is possible. In particular it does not find the argument of the respondents convincing that the amendment of the claim put the objective of obtaining a higher delivery velocity into the foreground and relegated the other objectives discussed above to the status of purely incidental advantages, with the consequence that documents D3 and D4, which did not mention this objective, were no longer relevant. In the opinion of the Board it remains an ineluctable fact that the containers of documents D1 and D9 suffer from the readily recognisable defect that no means are provided for preventing inadvertent discharge of the liquid and that this technical problem can be solved in an obvious manner by the inclusion of a self-seal valve of the type disclosed in documents D3 and D4 at the discharge orifice. In any case, as discussed above, the Board is also satisfied that the person skilled in the art would recognise a higher delivery velocity as an inherent and predictable consequence of using such a self-seal value.

The subject-matter of claim 1 of the first auxiliary request also therefore lacks inventive step.

4. *Second auxiliary request*

Claim 1 of the second auxiliary request, first

submitted at the oral proceedings before the Board, is directed to a process for delivering a toilet bowl cleaner in a particular manner from a container as set out in granted claim 1.

It belongs to the established jurisprudence of the Boards of Appeal that the admission of amended claims into appeal proceedings, particularly when the amendments are first submitted at oral proceedings, is at the discretion of the Boards, see for example T 95/83 (OJ EPO 1985, 75) and T 153/85 (OJ EPO 1988, 1). The factors which need to be taken into account when exercising this discretion include whether the amended documents are clearly allowable, firstly in the sense of conforming with the formal requirements of the EPC and secondly in the sense of having at least a reasonable prospect of removing the outstanding substantive objections against the documents previously on file.

In the present situation the change of category of claim 1 leads to difficult questions under Article 123(3) EPC which cannot be immediately answered, cf point 2 of the reasons in T 402/89 (not published in OJ EPO). In any case the process defined in the claim corresponds in general terms to how the containers disclosed in documents D1 and D9 are used in practice so it is again not possible to see how the reformulation of the claim can have significant impact on the negative evaluation of inventive step made above. The latter would also be true of a claim amended to read as a use claim, as offered by the respondents as a way of dealing with a possible objection under Article 123(3) EPC.

The Board therefore comes to the conclusion that the second auxiliary request of the respondents should not be admitted into the proceedings and accordingly rejects it.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

S. Fabiani

F. Gumbel