DECISION
of 11 December 2002

Case Number: T 0954/02 - 3.2.4
Application Number: 95925399.8
Publication Number: 0772410
IPC: A45D 40/04

Language of the proceedings: EN

Title of invention:
Improved twist-up product dispenser having conformable apertured applicator surface

Applicant:
THE PROCTER & GAMBLE COMPANY

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 52, 54, 84, 97, 123(2)

Keyword:
"Novelty (yes)"

Decisions cited:
-

Catchword:
-
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DECISION
of the Technical Board of Appeal 3.2.4
of 11 December 2002

Appellant: THE PROCTER & GAMBLE COMPANY
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 28 February 2002 refusing European patent application No. 95 925 399.8 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: C. A. J. Andries
Members: C. D. A. Scheibling
C. Holtz
Summary of Facts and Submissions

I. By its decision dated 28 February 2002 the Examining Division refused the application. On 4 April 2002 the appellant (applicant) filed an appeal and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 4 July 2002.

II. The patent application was refused by the Examining Division on the grounds based on Articles 97(1), respectively 52(1), 54 and 84 EPC. The Examining Division came to the conclusion that the subject-matter of claim 1 as filed with letter of 18 April 2001 was not novel with respect to D1: EP-A-0 312 165 and not clear.

III. On behalf of the Board, the Rapporteur informed the appellant orally that, should the clarity objections against claim 1 be removed, the Board could consider claim 1 to be novel and would in that case be prepared to remit the case to the first instance for further prosecution.

IV. With letter dated 19 November 2002, the appellant filed a new claim 1 and requested that clarity and novelty of that claim be acknowledged and that the case be remitted to the first instance for further prosecution.

V. Independent claim 1 as filed with letter of 19 November 2002 reads as follows:

"1. A dispenser (10) for dispensing a product (99) onto a surface, said dispenser having a container body (20) with an interior chamber for containing the
product (99) and a dispensing opening; said dispenser further comprising:

(a) a conformable applicator element (50) affixed to the container body (20) across the dispensing opening and substantially covering the dispensing opening, the applicator element (50) having a plurality of discrete apertures extending therethrough, the apertures having upper edges which collectively define an applicator surface of the applicator element (50);

(b) a product supply mechanism within the interior chamber for advancing the product (99) toward the applicator surface such that the product (99) fills the apertures to a level substantially even with the applicator surface, the product supply mechanism characterised by:

(i) a force-limiting element (36, 72, 110, 130) for halting advancement of the product (99), the force-limiting element having a pre-determined threshold which limits the amount of force the product (99) can exert upon the applicator element during advancement of the product to prevent extrusion of the product through the apertures; and

(ii) a force-maintaining element (70, 140) for maintaining a pre-determined force level between the product (99) and the applicator element during dispensing of the product (99)".
Reasons for the Decision

1. The appeal is admissible.

2. Amendments – compliance with Article 123 (2) EPC:

2.1 The expression "In a dispensing package" was changed to read "A dispenser". As a matter of fact, the term "dispenser" was used throughout the description to designate the claimed object (the dispensing package) (see WO-A-96/03899; page 2, line 15; page 3, lines 27, 28; page 4, line 29; page 7, lines 3, 6, 7, 11, 13). Therefore, this modification is acceptable according to Article 123(2) EPC.

The dependent claims still have to be adapted accordingly.

2.2 The expression "said dispenser further comprising" was introduced in the prior art portion of claim 1. The introduction of said expression does not modify the scope of the claim in any way and thus, is also acceptable according to Article 123(2) EPC.

2.3 Finally, in the following sentences of the characterizing part of claim 1: "the amount of force the product (99) can exert upon the applicator surface" and "for maintaining a pre-determined force level between the product (99) and the applicator surface", the term "applicator surface" was modified to read "applicator element". These modifications are supported by the definition given in the prior art portion of claim 1 where the following is indicated "the applicator element (50) having a plurality of discrete apertures extending therethrough, the apertures having
upper edges which collectively define an applicator surface of the applicator element (50)". Thus, it is clear that the part of the dispenser which is in contact with and thus submitted to the force exerted by the product is the "applicator element" and not the external surface thereof, i.e. the "applicator surface". Therefore, these modifications also meet the requirements of Article 123(2) EPC.

3. **Clarity:**

The Board considers that claim 1 now on file meets the requirements of clarity of Article 84 EPC. The Examining Division objected that the force-maintaining/limiting elements are left without definition. However, since the description gives a skilled person examples how to realise said claimed functions and since there is no prior art document disclosing said functions, to define more precisely the force-maintaining/limiting elements would unduly restrict the scope of the claim.

4. **Interpretation of the independent claim 1:**

4.1 "Force-limiting element ... for halting advancement of the product" is to be interpreted as meaning an element which halts (stops) advancement of the elevator (and thus the product) when the force exerted by the product on the applicator element (and thus by reaction also on the elevator) overcomes a pre-determined threshold (see feature (i) of claim 1 and WO-A-96/03899; page 6, line 25 to page 7, line 2).

4.2 "Force maintaining element" is to be interpreted as meaning an element exerting a force on the product such
that the product is in constant intimate contact with the applicator element, but with a force level that at maximum is just below that which would extrude product through the mesh of the applicator element (see feature (ii) of claim 1 and WO-A-96/03899; page 6, lines 9 to 24).

5. Novelty:

5.1 D1 (claim 1; Figures 10 to 13) discloses a dispensing package for dispensing a product onto a surface, the dispenser having a container body (21'') with an interior chamber for containing the product and a dispensing opening;

a conformable applicator element (22'') affixed to the container body (21'') across the dispensing opening and substantially covering the dispensing opening, the applicator element (22'') having a plurality of discrete apertures (23'') extending therethrough, the apertures having upper edges which collectively define an applicator surface of the applicator element (22'');

a product supply mechanism within the interior chamber for advancing the product toward the applicator element such that the product fills the apertures (23'') to a level substantially even with the applicator surface.

5.2 Thus, the dispensing package according to D1 differs from the dispensing package according to claim 1 of the application in suit in that it further comprises:

- a force-limiting element for halting advancement of the product, the force limiting element having a pre-determined threshold which limits the amount of force the product can exert upon the applicator element during advancement of the product to
prevent extrusion of the product through the apertures, and

- a force-maintaining element for maintaining a predetermined force level between the product and the applicator element during dispensing of the product.

5.3 As disclosed in D1, column 18, line 46 to column 19, line 6 and column 9, line 50 to column 10, line 17 and especially with reference to the third embodiment of D1 (Figures 10 to 13), by rotating the hand wheel 33' the feed screw 31'' rotates and advances the elevator 27'', in the same time the follower 35'' rides up the ramped forward cam faces 37'' further increasing the advance of the elevator 27'' while the action of spring 53 (but also of springs 40, 48/49 if considering the other embodiments) is opposed to said ride up.

Thus, until the crest of the cam is reached, the cam and follower action increases the elevator displacement and consequently the force applied to the product and transmitted by the product to the applicator element. Once the follower passes the crest a retraction of the elevator occurs. However, due to the fact that during the ride up of the cam face the feedscrew also displaces the elevator, a resultant positive displacement of the elevator is nevertheless obtained (see Figures 14 to 16, elevator displacement, points bearing the reference numbers 62', 62'', 62'''). Consequently, there is no (force-limiting) element in D1 for halting advancement of the product. Furthermore, should the reaction force exerted by the product increase and assuming that the slope of the cam is greater than the slope of the feedscrew (which seems
to be reasonable since the screw pitch is ranging from about 1 to 5.1 mm for a diameter ranging from about 3.2 to 17.3 mm (see column 7, lines 6 to 8 and 13, 14), whereas the slope of the cams is ranging from 20° to 50° (see column 8, lines 34 to 37)) then, beyond a certain value the force needed by the follower to ride up the ramped cam face would become so much greater than the force needed to move the feed screw that the follower would be unable to ride up the cam, becoming inactive and any further rotation of the hand wheel would be directly transmitted to the feedscrew and move the elevator.

Consequently, there is no force-limiting element in D1 having a pre-determined threshold which limits the amount of force the product can exert onto the applicator element.

5.4 Furthermore, during dispensing of the product, when the follower is riding up the ramped cam face, as soon as the rotation of the hand wheel is stopped, the spring acts to retract the elevator, releasing pressure and normally cancelling the force exerted on the applicator surface (since the aim of D1 is that the retraction of the elevator stops dispensing of the product, see description column 11, lines 7 to 16). Even if not all of the pressure is released - since the elevator does not return to its initial position because of the displacement imparted by the feedscrew - this residual pressure would in any case not be due to the positive action of an "element", would not correspond to a pre-determined controllable force level and would only be present when dispensing of the product has already stopped.
Thus, D1 does not disclose an element providing a force-maintaining action at a pre-determined force level during dispensing of the product.

5.5 Thus, the subject-matter of claim 1 is novel with respect to D1.

5.6 Furthermore, the subject-matter of claim 1 is also novel with respect to D2 (= US-A-4 013 370) and D3 (= WO-A-91/10469) which neither disclose any force-limiting element, nor disclose any force-maintaining element.

6. Remittal

Thus, owing to the fact that clarity and novelty of claim 1 are given and that the Examining Division did not examine said claim with respect to inventive step, the case is remitted to the first instance, according to the provisions of Article 111(1) EPC, for further prosecution as to the other requirements of the EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution on the basis of the following claims: claim 1 filed with letter of 19 November 2002 and claims 2 to 10 filed with letter of 18 April 2001.
The Registrar: G. Magouliotis
The Chairman: C. Andries