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D E C I S I O N
of 22 January 2002

Case Number: T 0874/99 - 3.2.4

Application Number: 95917366.7

Publication Number: 0709053

IPC: A47K 11/10

Language of the proceedings: EN

Title of invention:

Disposable toilet scraper and fabrication method

Applicant:

S.A. FOLTEX DE NUEVOS PRODUCTOS

Opponent:

-

Headword:

-

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step - yes"

Decisions cited:

-

Catchword:

-



Case Number: T 0874/99 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 22 January 2002

Appellant: S.A. FOLTEX DE NUEVOS PRODUCTOS
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 12 March 1999
refusing European patent application
No. 95 917 366.7 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: C. A. J. Andries
Members: M. G. Hatherly
C. Holtz

Summary of Facts and Submissions

- I. On 29 April 1999 the appellant (applicant) filed a notice of appeal against the examining division's decision of 12 March 1999 refusing the European patent application No. 95 917 366.7 (publication No. EP-A-0 709 053) for lack of inventive step. The appeal fee was paid simultaneously and the statement of grounds of appeal was received on 6 July 1999.
- II. After a communication from the board discussing the appeal, the appellant filed amended pages of the application for main and auxiliary requests.

The independent claims of the main request (after correction of clerical errors listed in sections 2.1.4 and 2.3 below) read:

"1. A disposable toilet scraper, for cleaning the inner wall of a toilet following use, made up of a hand-grip part and a cleaning part, both made of water-soluble material, comprising a single-piece elongated sheet-like body of rigid structure, which presents two distinct regions (1,102; 2,103), one region being a manual gripping area (1,102) which is longer, and the other region being a flat spade-like cleaning area (2,103) which is shorter and wider."

"10. A manufacturing process for a toilet scraper as claimed in Claims 4 and 6, characterized in that it comprises:

supplying in continuous form a strip of water-soluble biodegradable material, along a path in longitudinal direction;

passing the strip between sets of moulds and

countermoulds (109,110) which form longitudinal ribs (105) upon the strip;

incorporating to the strip (107) a product to retard its dissolution in the water, said product being deposited on short zones (103c), regularly spaced apart by sections (102) of unimpregnated strip of greater length, and equivalent to two spade-sections (103) of two corresponding scrapers, oriented in opposite directions;

flattening the impregnated areas (103c) of the strip in a pressing station (112), which acts regularly and intermittently;

cutting the strip (107) along the middle of the flattened zones, to provide the scrapers."

III. In the statement of grounds of appeal, the appellant alleged that a substantial procedural violation had occurred during the examination proceedings and so requested the reimbursement of the appeal fee. The board explained in the above cited communication why, provisionally, it could not agree with the appellant. At the bottom of page 2 of the reply of 30 October 2001 the appellant stated that it was satisfied with the board's reasoning in this respect.

IV. The cited prior art is

D1: EP-A-0 313 495

D2: DE-A-3 910 307.

V. The main request of the appellant is that the decision of the examining division be set aside and that a patent be granted in the following version:

- claims 1 to 10 of the main request filed with the letter of 30 October 2001;
- description pages 1 to 9 of the main request filed with the letter of 30 October 2001; and
- Figures 1 to 8 as originally filed.

Additionally the appellant requests reimbursement of the appeal fee.

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments - main request*
 - 2.1 Claim 1 of the main request differs from that originally filed only as follows:
 - 2.1.1 As explained in section 4.5 of the board's communication of 30 August 2001, a correctly divided two-part claim according to Rule 29(1) EPC would be unnecessarily complicated, so the new claim is in one part.
 - 2.1.2 The word "laminar" in the expression "single-piece elongated laminar body of rigid structure" has been replaced by "sheet-like".

Section 3 of the board's communication of 30 August 2001 explained that while the embodiments shown in Figures 1, 2 and 5 were laminar, the board considered that this word could not be used to describe the ribbed

embodiment of Figure 3 or the tubular embodiment of Figure 4. The board stated that whatever was intended by the word "laminar" needed to be clearly expressed in the claim since merely deleting the word "laminar" would remove the difference on which the appellant relied for novelty and inventive step.

The appellant has chosen the term "sheet-like" to replace "laminar" and the board is unable to find a better term. It expresses the idea of one dimension (the thickness) of the scraper being small compared with the others and the board considers that it can be applied to the ribbed embodiment of Figure 3 and the tubular embodiment of Figure 4. Moreover any doubt as to the extent of the meaning of claim 1 is removed by the presence of the dependent claims 6 ("the sheet-like body presents longitudinal ribs") and 7 ("the sheet-like body has a tubular shape").

2.1.3 The cleaning area 2, 103 is additionally specified to be "flat spade-like" which can be derived from the originally filed drawings. The originally filed claim 5 and page 7, lines 16 to 18 of the originally filed description add that the thickness of this area decreases towards the front edge but Figure 2 shows that this is not essential.

2.1.4 The board has corrected a clerical error in the reference numerals for the manual gripping area which now read "(1,102)" instead of "(1.102)".

2.2 The dependent claims 2 to 4 are identical to those originally filed while the dependent claims 5 to 9 have merely been brought into line with the new claim 1.

2.3 In claim 10 the board has corrected a clerical error in the reference numerals for the sets of moulds and countermoulds which now read "(109,110)" instead of "(108)". Otherwise, claim 10 is identical to that originally filed.

2.4 The description has merely been brought into line with the present claims and a trade mark acknowledged in line 20 of page 8.

2.5 The drawings are those originally filed.

2.6 For the above reasons, the board has no objection under Article 123(2) EPC to the version of the application for the main request.

3. *Novelty - claim 1 of the main request*

3.1 D1

3.1.1 D1 discloses a sanitary utensil. It is a disposable toilet scrubber, for cleaning the inner wall of a toilet following use and is made up of a hand-grip part 1 and a cleaning part 2, both may be made of water-soluble material (see column 2, lines 23 to 25).

The utensil may be a single piece (see claims 3 and 6 and compare what is described there with the independent scrubbing member and stem described in claim 4).

The utensil is elongated and presents two distinct regions (stem 1 and scrubbing member 2), one region 1 being a manual gripping area which is longer, and the other region 2 being a cleaning area which is shorter

and wider.

- 3.1.2 D1 states in column 1, lines 58 to 61 that the scrubbing member 2 "is formed by a division in the form of longitudinal strips of an end portion of the stem". Column 2, lines 4 to 6 state that the "scrubbing member may comprise a bundle of strips or fibres in the form of a brush or spatula, or a sponge material body".

On the one hand, lines 27 to 32 of column 1 of D1 write of "the serious limitations or drawbacks of the usual brushes ... the desirability of eliminating them and replacing them with another type of utensil" which implies that the utensil of D1 is not a brush. Moreover column 2, line 5 specifies a spatula.

On the other hand, lines 58 to 61 of column 1 state that the scrubbing member 2 "is formed by a division in the form of longitudinal strips of an end portion of the stem" and lines 4 to 6 of column 2 refer to the spatula in the context of the "scrubbing member may comprise a bundle of strips or fibres in the form of a brush or spatula, or a sponge material body".

- 3.1.3 The board sees no explicit disclosure in D1 of a scrubbing member being anything other than "a division in the form of longitudinal strips" or "a bundle of strips or fibres" or "a sponge material body". It may be that the comparison is being made in lines 27 to 32 of column 1 between a prior art multi-use brush and D1's one-use flushable brush.

Leaving aside the alternative of the scrubbing member being a sponge material body, what remains seems to be merely a type of brush. This would scrub rather than

scrape.

3.1.4 Moreover, according to column 2, lines 47 and 48 of D1, the "stem 1 may be formed as a compact rod, as a spiral or as a tubular member", the stem, according to column 2, lines 31 to 36, being "provided with weakened areas comprised of annular slots 4 adapted to facilitate manual destruction into portions 5, after the use of the utensil, for throwing in the toilet and subsequent decomposition like the scrubbing member 2."

3.1.5 Thus the subject-matter of claim 1 of the main request, e.g. that it defines a scraper in the narrow sense of the word, comprising a sheet-like body with a flat spade-like cleaning area, is not disclosed by D1.

3.2 D2 discloses a stiffened flushable one-use toilet brush ("Klobürste") which gradually loses its shape in water. The precise construction is not disclosed, the section on the performance possibility ("Ausführungsmöglichkeit") specifying (and the left-hand side of the drawing sheet showing) a paper hat form (dunce's cap) while the right-hand side of the drawing shows something shaped more like a bath plunger. It is not clear whether the device really is a brush (as D2 says) or whether it is a scraper but it is clear that neither of the shapes disclosed by D2 is anything like the elongated sheet-like body of the present scraper with its flat spade-like cleaning area.

3.3 Thus the subject-matter of claim 1 of the main request is novel over the available prior art (Articles 52(1) and 54 EPC).

4. *Closest prior art, problem and solution*

4.1 Since the disclosure of D2 is incomplete, it is an unsuitable starting point for assessing inventive step. The board considers that D1 is a more promising document.

4.2 D1 discloses various sanitary utensils, most comprising a type of brush (see section 3.1.3 above). Lines 10 to 14 of claim 1 of D1 specify that the stem 1 (i.e. the handle) is intended to be separated from the scrubbing member 2 (i.e. the brush) after the cleaning operation. The brush is then flushed (see claim 1, lines 15 to 19). The handle may be flushed, disposed of as rubbish or attached to a further brush (see column 2, lines 39 to 43).

The board finds that the prior art device closest to that of the present invention is the embodiment of the flushable brush and flushable handle disclosed by D1. As stated in the paragraph immediately above, the brush and the handle are separated from each other prior to flushing.

4.3 Pages 1 and 2 of the description of the main request discuss the advantages and disadvantages of multi-use toilet brushes, one-use flushable brushes with multi-use handles, and completely flushable one-use brush and handle combinations.

4.4 The closest prior art utensil of D1 comprises a brush and needs to be separated into two or more parts after the cleaning operation. The problem to be solved when starting from this prior art utensil is to reduce the cost and to improve disposal. This is achieved in the present invention by providing a simple scraper instead of a brush and by constructing the whole utensil in

such a way that it can be flushed whole without the user needing to overcome his reluctance to break the handle from the soiled cleaning part. These objects are achieved because the scraper is a single-piece elongated sheet-like body of rigid structure.

5. *Inventive step - claim 1 of the main request*

The board cannot see that the skilled person would be led from the flushable brush and separable, flushable handle disclosed by D1 to the present one-piece scraper. Apart from the alternative of the scrubbing member being a sponge material body, D1 only discloses types of brushes and not a scraper comprising a flat spade-like cleaning area. Moreover it is essential in D1 (because this is specified in lines 10 to 14 of claim 1) that the handle is separated from the brush for flushing, whereas the present scraper is disposed of whole.

D2 discloses one-piece utensils which seem to be flushed whole. However the shapes are nothing like that of the present scraper, certainly they have no flat spade-like cleaning area. Indeed the drawings of D2 give the impression of very large utensils and the skilled person would question whether these would flush at all until substantial disintegration had occurred, whereas the sheet-like scraper of the present invention could be flushed intact and left to disintegrate downstream of the toilet.

Thus the only prior art documents on file, D1 and D2, taken separately or together, would fail to lead the skilled person in an obvious manner to the subject-matter of claim 1 of the main request (Articles 52(1)

and 56 EPC).

Accordingly claim 1 of the main request is patentable.

6. Claims 2 to 9 of the main request are dependent on the allowable claim 1 and are also patentable.
7. Claim 10 of the main request is directed to "A manufacturing process for a toilet scraper as claimed in Claims 4 and 6" and so is tied to a toilet scraper with more essential features than that of claim 1 of the main request that has been found to be patentable. Moreover neither of the cited prior art documents on file disclose a manufacturing process, let alone a manufacturing process as specified in detail by claim 10 of the main request. This claim is therefore patentable.
8. A patent can therefore be granted based on the allowable independent claims 1 and 10 and on claims 2 to 9 which are dependent on claim 1.
9. The appellant's **auxiliary request** therefore has no effect.
10. In its communication the board provisionally stated that it could not see that a substantial procedural violation had taken place during the examination proceedings and that it did not intend to reimburse the appeal fee. The board has now reviewed these points but sees no reason to deviate therefrom, particularly since the appellant is satisfied with the board's reasoning.

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 with the order to grant a patent in the following version:
 - claims 1 to 10 of the main request filed with the letter of 30 October 2001;
 - description pages 1 to 9 of the main request filed with the letter of 30 October 2001; and
 - Figures 1 to 8 as originally filed.
3. The request for reimbursement of the appeal fee is refused.

The Registrar:

The Chairman:

G. Magouliotis

C. Andries