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Bezeichnung der Erfindung:
Title of invention: Process and device for manufacturing multicoloured
Titre de l'invention : detergent bars

ENTSCHEIDUNG / DECISION
vom / of / du 29 August 1983

Anmelder / Applicant / Demandeur : UNILEVER Ltd.

Stichwort / Headword / Référence :

EPÜ / EPC / CBE Article 52(1), 56

"Inventive step - Problem and inventive step"

Leitsatz / Headnote / Sommaire

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 98 /82

DECISION

of the Technical Board of Appeal 3.3.1

of 29 August 1983

Appellant: UNILEVER Limited,
London EC4
England

and

UNILEVER NV,
Rotterdam, Netherlands

Representative: Roscoe, Brian Corrie
UNILEVER PLC
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Decision under appeal: Decision of Examining Division 023 of the European Patent Office dated 11 November 1981 refusing European patent application No 80 301 067.7 pursuant to Article 97(1) EPC

Composition of the Board:

Chairman: D. Cadman

Member: K. Jahn

Member: L. Gotti Porcinari

SUMMARY OF FACTS AND SUBMISSIONS

I. European Patent Application No. 80 301 067.7 filed on 3 April 1980 and published on 10 December 1980 under publication No. 0 019 996, claiming the priority of the British prior application of 6 April 1979 was refused by decision of the European Patent Office dated 11 November 1981 on the basis of the original claims 1, 2, 4, 5 and 8 of which claim 1 has the following wording.

"1. A method of manufacturing multi-coloured detergent bars wherein detergent material is extruded through a multi-apertured plate to form rods which are compacted inwardly as they pass through an extrusion cone, and a liquid differing in visual appearance to the detergent material is injected through at least one point within or immediately downstream of the multi-apertured plate, characterised in that the multi-apertured plate is provided with spaced apertures at its periphery which extend to the edge of the area through which the detergent material passes."

II. The stated ground for the refusal was that the application lacked inventive activity in the light of GB-A-1-387 567. This document reveals a method of manufacturing multi-coloured detergent bars having the features of the prior art portion of claim 1. In order to provide a surface striping on the bars of consistent and striking appearance the multi-apertured plate is provided with spaced apertures at its periphery which extend to the edge of the area through which the detergent material passes, as specified in the characterising portion of claim 1.

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According to the further embodiment of the above citation shown in figures 5 and 6, the plodder is however provided with a second multi-apertured plate having spaced apertures at its periphery which extend to the edge of the area through which the detergent material passes. Hence the subject matter of claim 1 differs therefrom only in the sense that the plate having the required aperture pattern, as required by the characterising portion of claim 1, is not provided with a liquid injection point within or downstream of it. Such a modification is considered obvious.

Although it is true that the second plate leads generally to a more diffused striping in the detergent mass, the peripheral apertures serve another function, that is to say to retain the stripes on the surface of the plodder bar. Hence it is evident to a skilled person, that the peripheral apertures do not produce the additional mixing effect of the other apertures. From the point of view of the problem of surface strip retention, the inducement is therefore furnished to provide these peripheral apertures also in the injection multi-apertured plate according to the GB Patent, since one could obviously expect that this would lead to bars of consistent and striking surface appearance.

III. On 7 January 1982 the appellant lodged an appeal by telex against the decision dated 11 November 1981. The appellant submits that the confirmation letter which did not arrive at the file in the original was sent on 12 January and delivered to the EPO on 14 January 1982. On 1 March 1982 a Statement of Grounds was filed, the substance of which is as follows:

.../...

The cited document discloses the process of striping a detergent bar by injecting liquid at a multi-apertured plate in a detergent plodder. The optional use of a second, downstream, plate is suggested. This downstream plate with its peripheral apertures provides a more diffused striping and assists in retaining the surface stripes while in the present application the peripheral apertures generate the surface striping.

Thus a person seeking to obtain a striking surface striping would not be drawn to incorporate a feature which is said to retain striping rather than to generate a striking effect. The different functions of the peripheral apertures in the two plates follow from the material passing through them. The downstream plate passes detergent material carrying stripes on its surface while the peripheral apertures in the present invention pass detergent material only and thereby form walls which constrain the surface liquid into stripes.

The appellant maintained the above claim 1 and filed on the Board's initiative new claims 2 to 4 which read as follows:

"2. A method according to claim 1 wherein the peripheral apertures contacct the edge of the extrusion area over a length.

3. A detergent plodder comprising extrusion means, an extrusion cone of decreasing sectional area, a multi-apertured plate positioned between the extrusion cone and plodder barrel or within the cone and at least one liquid injection means positioned within the multi-apertured plate or immediately behind the surface of

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the plate facing the narrower end of the cone, characterised in that the multi-apertured plate is provided with spaced apertures at its periphery which extend to the edge of the area through which the detergent material passes.

4. A detergent plodder according to claim 3 wherein the perpheral apertures contact the edge of the extrusion area over a length."

The appellant requested that the decision under appeal be set aside and that the patent sought should be granted with claims in these terms.

REASONS FOR THE DECISION

1. The appeal was notified to the office by telex in due time. In accordance with Rule 36(5) EPC, the appellant had to file within 2 weeks a document reproducing the content of the telex. The appellant alleges that he sent the confirmation letter on 12 January 1982, but no record of it is available in the file. After having sent a copy of the above mentioned letter to the EPO, the appellant carried out a proper inquiry to obtain evidence of posting and delivery of the 12 January 1982 confirmation letter. As a result of this inquiry the appellant, on 1 July 1982, submitted to the office a copy of a document, provided by the UK Post Office, and sent to the EPO by German Post Office. This document states that the delivery was made on 14 January 1982. It was also accompanied by a copy of the postcard provided by the UK Post Office bearing the reference number as used in the application (B 487) and the registration No. 488 854).

A check was also carried on by the Registry of the Examining Division in the EPO Post Office and, as a result, an empty envelope was found addressed to the EPO from UNILEVER stamped 12 January 1982 London P.O. and 14 January 1982 Munich P.O. bearing the same registration number as mentioned on the list of Registered Postal Packets and in the confirmatory document of the London Post Office as well. Of course, it cannot be proved that the envelope contained the confirmation letter which the appellant states that he sent to the EPO, relating to the case in question, but under the circumstances given it is unlikely that the envelope contained another letter other than the missing one.

Therefore, the Board considers the appeal admissible and in accordance with Articles 106 to 108 and Rule 64 EPC.

2. There can be no formal objection to the current version of the claims, since it is adequately supported by the specification as originally filed. Claims 1, 2 and 4 are identical with the original claims 1, 2 and 5. Claim 3 is based on the original claim 4 in combination with page 6 lines 18/19 and page 7 lines 3 to 6 an 12/13.

3. As indicated in the beginnng of the present application, the applicant starts from GB-A-1 387 567 which is concerned with a method and a device of manufacturing striped detergent bars comprising the steps of passing a detergent mass through a multi-apertured plate to form rods, introducing a liquid between the rods in at least one position, compressing the rods inwardly to form a continuous mass having striations of the liquid therein, cutting the mass into billets and stamping the latter to

form bars (cf. claim 1). These bars, however, have a random distribution of surface striations which are not reproducible from bar to bar (cf. page 2 lines 20 to 26).

The problem underlying the application in suit must be seen in the overcoming of a non-reproducible random distribution of surface striation which results from that known method, and providing instead bars with consistent, regular and striking external striation. (cf. page 2 paragraph 2 and page 4 lines 2/3).

In order to solve this technical problem, the applicant proposes a process and device as set out in claims 1 and 3 where the multi-apertured plate is provided with spaced apertures at its periphery which extend to the edge of the area through which the detergent material passes.

4. The colour photographs received from the appellant on 15 January 1983 demonstrate that this aim (sheet 2 of 2 = test bar) has effectively been achieved vis-à-vis the cited prior art in its simplest version (multi-apertured plate according to figure 2 of the citation; sheet 1 of 2 = control bar).

5. A teaching comprising the technical problem and its solution as defined above cannot be gathered from the publications before the Board.

It is true that US-A-3 676 538 discloses a method and device of extruding detergent material through a multi-apertured plate with the same pattern of apertures as claimed in the present application (cf. figures 3 and 5 particularly 38b). Nevertheless, the coloured liquid is introduced into the soap-mass before it arrives at the

.../...

multi-apertured plate (fig. 3 in combination with column 4 lines 17 to 20). The result of this mode of operation is a marble-like appearance of the soap bar (cf. abstract). In contrast to this known method and apparatus, the present application proposes to inject the colour liquid between the rods of the soap. Therefore, the application in suit is deemed to be novel.

6. In order to be patentable an invention must involve an inventive step. In connection with this question US-A-3 676 538 must be disregarded, since this document aims at the solution of a quite different problem (marble-like effect).

7. However, GB-A-1 387 567 is concerned with the production of multicoloured striped detergent bars (cf. page 1 lines 10 to 15, 70 to 77 in combination with claim 1 and all examples), a problem which is comparable with that underlying the present application. In the Board's view, this document represents the closest state of the art.

As already pointed out in more detail in paragraph 3, this publication reveals the passage of a soap mass through a multi-apertured plate followed by an injection through at least one point within or downstream that plate of coloured liquid between the soap rods formed, and inward compression of these rods (cf. claims 1, 2, 4). The only example of such a multi-apertured plate within this concept (cf. fig. 1 in combination with page 2 line 116 to page 3 line 21) is represented in figure 2. This plate differs from that applied in the present application in that its peripherical apertures do not extend to the edge of the area through which the soap mass passes.

.../...

8. In a second embodiment of this process the compressed soap mass can be passed through a second multi-apertured plate downstream of the first plate (claim 6 in combination with figure 5). This two-plate concept is convenient when a more diffused striping effect is desired (cf. page 1 lines 85 to 89 and page 4 lines 27 to 34). Preferably the downstream plate does not contact the cone, which forms its support surface, completely at the periphery (cf. figure 6 in combination with claim 7 and page 4 lines 37 to 40).

This incomplete contact assists in retention of the stripes on the surface of the plodded bar (cf. page 4 lines 40 to 42). It is just this last mentioned sentence on which the refusal of the application by the first instance is based.

In the Board's view the Examining Division failed to appreciate the value of this statement in relation to the technical problem underlying the present application. This problem does not consist in retention of the stripes on the surface of the bar, but in the overcoming of a non-reproducible random distribution of surface striation and providing instead bars with consistant, regular and striking external striation. The teaching of the function of the second downstream non-injection plate (with a pattern of apertures according to figure 6 of the citation) can only have relevance to a double plate concept without permitting any conclusion as to how that plate would work when used as injection plate in a single plate concept.

Furthermore, the statement in the publication does not hold out an inducement to the skilled reader to depart altogether from the known double multi-apertured plate

system including an injection-plate of the sort of figure 2 and a downstream plate with a pattern designed in figure 6 and to replace that concept by a one plate system having the characteristics of figure 6.

9. But even if the skilled man had realised that a perforated plate with apertures at its edge when furnished as injection plate provided stripes on the surface of the bar, he would not have resorted to such a plate in view of the problem to be solved, since it could not have been considered as a remedy against random distribution of the stripes.

Consequently, the skilled man was not able to draw the conclusion from prior art that the applicant's problem might be solved by simple substitution of the multi-apertured plate according to figure 2 of the citation by that of figure 6.

For the foregoing reasons the subject matter of the claims 1 and 3 is based on an inventive step. The dependent claims 2 and 4 concern special embodiments according to claim 1 and 3 and are likewise supported by the inventivity of the subject matter of the main claims.

ORDER

It is decided that

1. The decision of the Examining Division of the European Patent Office dated 11 November 1981 is set aside

.../...

2. The case is remitted to the first instance with the order to grant a European patent on the basis of the following documents

Description : original pages 1, 5, 6, 8 and 9
pages 2 to 4a and 7 dated 12 July 1983, received on 14 July 1983

Drawings : original figures 1 to 4

Claims : 1 to 4 dated 25 April 1983, received on 27 April 1983, account being taken of the amendment requested on 18 July 1983.

The Registrar: The Chairman:

Signed: J. Rückerl Signed: D. Cadman