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**Datasheet for the decision
of 27 September 2021**

Case Number: T 0074/19 - 3.3.06

Application Number: 10005125.9

Publication Number: 2388309

IPC: C11D17/00

Language of the proceedings: EN

Title of invention:

Detergent tablets having more than four side surfaces

Patent Proprietor:

Dalli-Werke GmbH & Co. KG

Opponent:

Henkel AG & Co. KGaA

Headword:

Octo- or decagonal detergent tablet/DALLI-WERKE

Relevant legal provisions:

RPBA 2020 Art. 13(2)

EPC Art. 56

Keyword:

Admittance of new auxiliary request 2 filed during oral proceedings - exceptional circumstances (yes)
Inventive step (new auxiliary request 2) - (yes)

Decisions cited:

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0074/19 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 27 September 2021

Appellant: Henkel AG & Co. KGaA
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
22 November 2018 concerning maintenance of the
European Patent No. 2388309 in amended form.**

Composition of the Board:

Chairman J.-M. Schwaller
Members: L. Li Voti
J. Hoppe

Summary of Facts and Submissions

- I. The opponent's appeal is against the decision of the opposition division to maintain European patent no. 2 388 309 in amended form on the basis of the claims according to the main request filed with letter of 15 December 2017.
- II. The appellant raised in its statement of grounds objections of lack of novelty and inventive step and cited *inter alia* documents D1 (DE 10 2004 010 281 A1), D2 (Wikipedia: Octagonal prism), D3 (WO 2006/021284 A1), D4 (WO 2006/119898) and D5 (DE 100 64 635 A1).
- III. In its reply the respondent (also patent proprietor) defended the patent in the version as maintained by the opposition division and filed amended sets of claims as auxiliary requests 1 and 2.
- IV. In response to the board's preliminary opinion the respondent with a letter dated 16 April 2021 submitted *inter alia* new auxiliary requests 1 to 5.
- V. During the oral proceedings held on 27 September 2021 the appellant raised new objections under Articles 84 and 123(2) EPC against claim 1 of the pending auxiliary request 2 and filed in this respect a drawing. The respondent then filed a new auxiliary request 2 and withdrew all the other requests. The appellant did not contest the admittance of this request and withdrew its objections as regards novelty and all further objections, except the one of lack of inventive step based on D3 or D5 as closest prior art. The final requests of the parties were thus the following:

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the decision under appeal be set aside and the patent be maintained in amended form based on the claims of auxiliary request 2 filed during oral proceedings.

VI. Claim 1 of this request (in the following "new auxiliary request 2") reads as follows:

"1. Detergent tablet having an upper and a lower surface and more than 4 side surfaces with more than four edges, wherein the tablet has 8 or 10 edges of equal angles and 8 or 10 side surfaces of the same length, wherein the side surfaces have equal length and the edges have equal angles, accordingly, the tablet is in the form of a symmetrical polygon."

Dependent claims 2 to 5 relate to particular embodiments of the claimed detergent tablet, claim 6 relates to a process for preparing a detergent tablet according to claims 1 to 4 and claims 7 and 8 relate to various uses of a detergent tablet according to claims 1 to 4.

Reasons for the Decision

1. Admittance of new auxiliary request 2 (Article 13(2) RPBA 2020)
 - 1.1 This request was filed during oral proceedings in replacement of the auxiliary request 2 which had been filed on 16 April 2021. The filing of this request amounts thus to an amendment of the respondent's appeal case which may be admitted into the appeal proceedings

under exceptional circumstances justified with cogent reasons by the party concerned (Articles 13(2), 25(1) RPBA 2020).

- 1.2 As explained by the respondent the new request limited the claimed subject-matter to the preferred embodiment of claim 2 as granted and its filing was rendered necessary by the new objections raised under Articles 123(2) and 84 EPC for the first time in the oral proceedings against claim 1 of the then pending auxiliary request 2.

Furthermore, as stated on page 1 of its letter dated 16 April 2021, the previous auxiliary request 2 already intended to limit the claimed subject-matter to the preferred embodiment of claim 2 as granted and was admissible since it had been filed as a reaction to the preliminary opinion of the board that the coated tablets disclosed in D3 and D5 already solved the technical problem dealt with in the patent, an argument which had not been brought by the appellant.

However, it had never been objected before that by incorporating into claim 1 only the wording "*accordingly, the tablet is in the form of a symmetrical polygon*" and omitting the remaining part of the wording of said claim 2, i.e. "*wherein the side surfaces have equal length and the edges have equal angles*", the desired limitation of claim 1 to the preferred embodiment of granted claim 2 was not achieved and the claim possibly was unclear or not complying with the requirements of Article 123(2) EPC since it could be understood to still include symmetrical tablets having two parallel longer side surfaces.

1.3 The board remarks that the appellant's objections to the former auxiliary request 2, which had been filed in reply to a new board's objection, were raised for the first time during oral proceedings and are based on an analysis and interpretation of the wording of claim 1, which was not evident at first sight, since the appellant had to file a drawing during oral proceedings for justifying its objections. Furthermore, the subject-matter of the new request overcomes problems under Articles 123(2) and 84 EPC without giving rise to new objections.

1.4 The board thus concludes that there were exceptional circumstances, justified with cogent reasons by the respondent, for the filing of the new auxiliary request 2 and therefore this request was admitted into the proceedings by the board.

2. New auxiliary request 2 - Inventive step (Article 56 EPC)

2.1 Claim 1 of this request concerns a detergent tablet in the form of a symmetrical polygon, having an upper and a lower surface and 8 or 10 edges of equal angles and 8 or 10 side surfaces of the same length, wherein the side surfaces have equal length and the edges have equal angles. Therefore the claimed tablet has a symmetrical octagonal or decagonal form, wherein the side surfaces have equal length and the edges have equal angles.

Thus, amended claim 1 does not cover elongated forms so that the opponent's objections based thereon for the former request do no longer apply. Moreover, as stated in its provisional opinion (point 3.1), the board agrees with the decision under appeal that tablets are

commonly known in the art to have a flattened form with the thickness being lower than the width and the length.

2.2 As explained in the patent (paragraphs [0002] - [0004]), the decrease of the weight of unit dose detergent tablets commonly provided for automatic dishwashing or laundry washing results in thinner tablets which are more fragile, resulting in potential breaking or damage during production, packaging or transport.

In particular it was found (paragraphs [0009] - [0011]) that rectangular and square tablets are difficult to steer or arrange during the processing, e.g. on a transport belt and during a wrapping process, at the speed used in these steps of preparation, resulting in abrasion and breakage of the tablets or of their edges with consequent middle to high dust charge whilst round tablets eliminate the problems of breaking edges of the tablets and of steering/arranging the tablets during the transport on the conveyor belts for further processing, but show tendency to spin causing significant abrasion resulting in an undesired high dust formation.

The object of the invention is thus as formulated in the patent (paragraphs [0005] and [0012]) as being the provision of stable detergent tablets providing a unit dose of a detergent which are easy to handle during preparation, transport and packaging, and thus have tendency to position themselves in a correct position during the belt transport to the next processing station without the tendency to block the transport due to turning and breaking of tablet edges and without the tendency to spin so that the dust charge is low.

- 2.3 The parties agreed that both documents D3 and D5 could be considered to represent the closest prior art.
- 2.3.1 In particular, D3 concerns the provision of detergent bodies such as tablets (page 16, second paragraph from the bottom) which have comparable hardness to the coated shaped bodies of the prior art and thus stability during transport and handling, for example against breaking of edges and abrasion, but at the same time better dissolution properties on use (see D3: page 2, last paragraph in combination with page 2, first and fifth paragraphs and page 1, fourth full paragraph).
- 2.3.2 D5 concerns (paragraph [0010] in combination with paragraph [0003]) the provision of coated detergent shaped bodies such as tablets (paragraph [0179]) which have a defined disintegration and dissolution kinetics and are stable against breakage, in particular of their edges, occurring during transport and handling.
- 2.3.3 The board has thus no reason not to accept both documents as suitable starting points for the evaluation of inventive step.
- 2.4 As regards the formulation of the technical problem solved by the claimed subject-matter with respect to the closest prior art, the respondent maintained that the technical problem had to be formulated as the provision of a detergent tablet that is subject to **less** abrasion and breakage of edges during production, transport and packaging, thus reducing the dust charge, which is indeed a more concise formulation of the technical problem derivable from paragraphs [0005] and [0012] of the patent.

2.4.1 The board remarks in this respect that D3 and D5 do not deal with the technical problem of reducing breakage of edges and abrasion during the production and transport of the tablet on a conveyor belt from the production station to the next processing stations, possibly including a coating station, thus reducing the dust charge, but only with the increased stability during transport and handling of **already coated** tablets.

2.4.2 Moreover, the patent shows in its examples (Table 1 on page 4) that uncoated symmetrical octagonal or decagonal tablets as claimed (examples F and G) provide credibly lower breakage and lower abrasion and dust charge during preparation, transport and packaging in comparison to uncoated tablets having rectangular, square or round forms (examples A to D).

2.4.3 Even though paragraph [0011] of the patent teaches that abrasion of round tablets might be overcome e.g. by applying a protective coating on the tablets, this solution concerns only the transport of already coated tablets to subsequent stations but not the breakage/abrasion and dust charge possibly occurring during preparation and transport of the tablets on a conveyor belt to the following stations **before coating**, a problem necessarily occurring also with the tablets of D3 and D5 before they are coated.

Therefore, even though also the claimed tablets may be coated (see paragraph [0021] of the patent), the claimed subject-matter clearly provides a minor breakage/abrasion of the tablets and thus less dust charge before coating.

2.4.4 Finally, as already indicated above the claim at issue does not cover elongated forms so that the opponent's

observations regarding the solution of the technical problem based thereon do no longer apply. Moreover, even though claim 1 can be interpreted as including very thin tablets, which would be presumably prone to breakage upon transporting on a conveyor belt and packaging, as submitted by the appellant and in the absence of counter-evidence, such tablets have also to be expected to be more stable than tablets in other geometrical forms such as rectangular, square or round ones, as shown in the patent.

- 2.4.5 Therefore in the board's view the technical problem posed has been convincingly solved across the entire breadth of claim 1 at issue.

- 2.5 It remains thus to be decided if it was obvious for the skilled person, starting from the closest prior art represented by a coated tablet according to D3 or D5, to select a symmetrical octagonal or decagonal form with the expectation of solving the technical problem posed.
 - 2.5.1 The board remarks that the detergent bodies and tablets disclosed in D3 (page 15, last paragraph and page 18, last full paragraph) and D5 (paragraph [0017]) may have any possible form. For example, D3 (page 15, last paragraph) prefers prismatic forms, such as trigonal, tetragonal or octagonal bodies, or oval or round detergent bodies whilst D5 (paragraph [0017]) considers rectangular, square or round forms or even irregular forms as equal alternatives to other geometrical forms like the octagonal one. In particular, it is to be stressed that these documents do not disclose that the cited octagonal form may be a symmetrical one as required by claim 1 at issue and shown in document D2.

The board remarks also that D5 (page 3, lines 29-30) indicates rather a preference for bodies having round corners or chamfered edges as represented in figure 4 (paragraph [0228]), which are also forms not corresponding to that of claim 1 at issue. Similar disclosures are also contained in D1 (paragraph [0010]) and D4 (page 3, second full paragraph) which were also cited by the appellant.

Therefore, neither D3 nor D5 or the other cited documents indicate a preference for a symmetrical octagonal or decagonal form as required by claim 1 at issue.

- 2.5.2 Moreover, neither D3 nor D5 address the problem of reducing breakage/abrasion and dust charge possibly occurring during preparation and transport of the tablets on a conveyor belt to the following stations before coating.

Therefore, the skilled person would not have found in these documents any incentive to select a tablet having a form as claimed with the expectation to solve the technical problem posed.

- 2.6 The board thus concludes that the subject-matter of claim 1 according to the new auxiliary request 2 was not obvious and so involves an inventive step.

For the same reasons dependent claims 2 to 5 as well as the preparation method of the tablets according to claim 6 or their uses according to claims 7 and 8 also involve an inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent in amended form based on the claims of the new auxiliary request 2 filed during oral proceedings of 27 September 2021, and a description to be adapted where appropriate.

The Registrar:

The Chairman:



A. Pinna

J.-M. Schwaller

Decision electronically authenticated