

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 1 April 1998

Case Number: T 0445/97 - 3.3.1

Application Number: 89203144.4

Publication Number: 0375022

IPC: C11D 17/00

Language of the proceedings: EN

Title of invention:
Solid detergent block

Patentee:
Unilever N.V., et al

Opponents:
Henkel Kommanditgesellschaft auf Aktien
The Procter & Gamble Company

Headword:
Detergent blocks/UNILEVER

Relevant legal provisions:
EPC Art. 83, 84, 108, 123(2)
EPC R. 57a, 64

Keyword:
"Admissibility of appeal (yes) - new claims filed for removing the grounds for revocation - partial reinstatement of the scope of the claims restricted during the opposition proceedings"
"Amendments (new main claim, auxiliary and second auxiliary main claims) - added subject-matter (yes)"
"Third auxiliary main claim not allowable under Rule 57a - amendment not removing any ground for opposition"
"Late filed fourth auxiliary main claim not admitted into the proceedings - not allowable under Articles 83 and 84 EPC"

Decisions cited:

T 0123/85, T 0064/85, T 0409/91

Headnote:

-



Case Number: T 0445/97 - 3.3.1

D E C I S I O N
of the Technical Board of Appeal 3.3.1
of 1 April 1998

Appellant: Unilever N.V. et al
(Proprietor of the patent) Weena 455
3013 AL Rotterdam (NL)

Representative: Hoorweg, Petrus Nicolaas
Arnold & Siedsma
Advocaten en Octrooigemachtigden
Sweelinckplein 1
2517 GK Den Haag (NL)

Respondent 01: Henkel
(Opponent 01) Kommanditgesellschaft auf Aktien
TFP / Patentabteilung
40191 Düsseldorf (DE)

Respondent 02: The Procter & Gamble Company
(Opponent 02) One Procter & Gamble Plaza
Cincinnati
Ohio 45202 (US)

Representative: Peet, Jillian Wendy
Procter & Gamble Technical Centres Limited
Whitley Road
Longbenton
Newcastle upon Tyne NE12 9TS (GB)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 3 March 1997
revoking European patent No. 0 375 022 pursuant

to Article 102(1) EPC.

Composition of the Board:

Chairman: A. J. Nuss

Members: J. M. Jonk
S. C. Perryman

Summary of Facts and Submissions

I. The Appellants (Patentees) lodged an appeal against the decision of the Opposition Division by which European patent No. 0 375 022 was revoked in response to an opposition, based on Article 100(a) EPC, which had been filed against the patent as a whole.

II. Claim 1 of the patent in suit read as follows:

"1. Solid detergent composition suitable for use in an industrial warewashing process and in the form of a block of a compressed granular material, said block having a weight of 1-5 kg and comprising:

5-80% by weight of an alkaline agent;

5-70% by weight of a builder; and

0-15% by weight of an active chlorine bleach."

III. The opposition was supported by several documents including:

(11) WO 89/11753 (corresponding to EP-A-0 417 116),

(12) US-A-4 681 914,

(13) DE-A-3 315 950,

(21) EP-A-0 000 076,

(22) EP-A-0 003 769, and

(23) GB-A-1 175 749.

IV. The decision was based on Claims 1 to 3 filed during the oral proceedings before the Opposition Division on 18 February 1997, Claim 1 reading as follows:

"Process for the manufacturing of a solid detergent composition suitable for use in an industrial warewashing process and in the form of a block of a compressed granular material, said block having a weight of 1-5 kg and comprising:

5-80% by weight of an alkaline agent;
5-70% by weight of a builder; and
0-15% by weight of an active chlorine bleach,

wherein a powder having a corresponding composition is compressed in a mould under a pressure of 3-30 kN/cm² to form a solid block."

The Opposition Division held that the subject-matter of these claims lacked inventive step in the light of document (12) in combination with document (13), or document (23) in combination with document (21) or (22).

V. The Appellants defended the patentability of the subject-matter of the patent in suit on the basis of a main claim and an auxiliary main claim as submitted together with their statement of the grounds of appeal filed on 7 July 1997. The main claim corresponded essentially to Claim 1 as granted, except that the detergent block was characterised in that it contained water in an amount of 7.1% or less. The auxiliary main claim was the same as

the main claim, except that it contained the active chlorine bleach as a mandatory component.

They argued that the subject-matter of the present claims was novel and also involved an inventive step, since the technical problem underlying the patent in suit, namely the provision of detergent blocks having a satisfying physical stability, was surprisingly solved by the low water content as claimed.

- VI. In reply, Respondent 02 argued that the appeal was inadmissible, firstly, because the statement of the grounds of appeal as submitted by the Appellants did not address any of the grounds for refusing the process claims which were the only claims considered in the decision under appeal and, secondly, because the Appellants were not entitled to replace the voluntarily restricted main claim forming the basis for the decision of the first instance, i.e. the process claim as filed during the oral proceedings before the Opposition Division, by a broader product claim. Moreover, he argued that the subject-matter of the present claims was not supported by the originally filed patent application
- VII. In a communication issued on 8 October 1997, the Board expressed the preliminary view that the appeal was admissible, but that the subject-matter of the present claims did not seem to meet the requirement of Article 123(2) EPC. Moreover, the Board observed that if the Board could be persuaded to accept new requests into the proceedings differing substantially from the request already considered by the first instance, that then it would be the normal procedure for the Board to remit the

case to the first instance. Finally the parties were requested to file any submissions at least one month before the date of the oral proceedings.

- VIII. In reply to this communication, the Appellants filed second and third auxiliary main claims. Moreover, they argued that the subject-matter of the present claims met the requirement of Article 123(2) EPC, since it could be derived from the patent in suit that a high water content of the formed detergent blocks and the uptake of moisture by them must be avoided, and because detergent blocks in accordance with Examples 2 and 3 of the patent in suit showed an insufficient physical stability due to the high water content of their ingredients as supported by **Annexes 1 to 11** as submitted on 27 February 1998.
- IX. Oral proceedings before this Board were held on 1 April 1998. Respondent 02 informed the Board of Appeal in a letter filed on 6 February 1998 that he would not attend the oral proceedings.
- X. During these oral proceedings the Appellants replaced the claims primarily put forward by five new ones headed new main claim, auxiliary main claim, second, third and fourth auxiliary main claim respectively in order to remove some formal objections put forward by the Respondents.

The **new main claim** read as follows:

"1. Solid detergent composition suitable for use in an industrial warewashing process having the form of a block of a compressed granular material, said block

having a weight of 1-5 kg and comprising:

- 5-80% by weight of an alkaline agent,
 - 5-70% by weight of a builder, and
 - 0-15% by weight of an active chlorine bleach,
- and
- having about 7.1% or less by weight of water."

The **auxiliary main claim** corresponded to that of the new main claim, except that the detergent block comprised 3.5-15% by weight of an active chlorine bleach.

The **second auxiliary main claim** read as follows:

"1. Solid detergent composition suitable for use in an industrial warewashing process having the form of a block of a compressed granular material, said block having a weight of 1-5 kg and comprising:

- 5-80% by weight of an alkaline agent,
 - 5-70% by weight of a builder, and
 - 0-15% by weight of an active chlorine bleach,
- with the proviso that the alkaline agent is substantially water free."

The **third auxiliary main claim** corresponded to that of the second auxiliary main claim, except that the proviso was replaced by the proviso **that the alkaline agent excludes sodium metasilicate 5aq and sodium perborate monohydrate.**

Finally, the **fourth auxiliary main claim** read as

follows:

"1. Solid detergent composition suitable for use in an industrial warewashing process having the form of a concentrated block of a compressed granular material, said block having a weight of 1-5 kg and comprising:

- 5-80% by weight of an alkaline agent,
- 5-70% by weight of a builder,
- 0-15% by weight of an active chlorine bleach,
- 0-10% by weight of a polymer,
- 0-5% by weight of an anti-foam, and
- optionally minor ingredients and additional components,

the type and amounts of the components of the concentrated block are selected such that when the concentrated block is stored in a closed container for a period of three months at 20° or 30°C the physical appearance is unchanged."

XI. With respect to these new main claims formal objections were raised by Respondent 01 as well as by the Board. In particular it was objected that the new main claim and the auxiliary main claim did not meet Article 123(2) EPC, since no basis could be found for the feature that the detergent block had a water content of 7.1 or less. Furthermore, it was objected that the second auxiliary main claim did not meet the requirements of Articles 123(2) and 84 EPC, because the feature that the alkaline agent was substantially water free as such was

not supported and because it was not clear whether alkaline perborate hydrates were excluded.

With respect to the third auxiliary main claim the Board considered that it did not seem to meet Rule 57a EPC, because the disclaimer did not adequately exclude inappropriate embodiments of the invention as claimed in view of the fact that, on the one hand, an upper limit of the water content of 7.1% by weight was put forward by the Appellants as being an essential feature and, on the other hand, the claim did not exclude the use of high amounts of sodium tripolyphosphate.6H₂O and sodium metasilicate.9H₂O.

Concerning the fourth auxiliary main claim submitted for the first time during the oral proceedings before the Board, the Board noted that, as submitted by Respondent 01, the claim of this request did not seem to be formally acceptable in view of the requirements for the allowability of such a functional feature, and that, therefore, the question had to be answered whether in the present circumstances this late filed claim could be admitted into the proceedings.

XII. The Appellants defended the formal allowability of the new main claim and the auxiliary main claim essentially in accordance with their written submissions. In particular, they submitted that the importance of the water content of the detergent blocks was evident from the patent application as filed and that the water content as claimed was based on Example 4.

Concerning the second auxiliary main claim, the

Appellants argued that the proviso as defined therein was based on the originally filed patent application and in particular on the examples using granular NaOH. Moreover, they contended that said claim unambiguously excluded sodium perborate monohydrate as being an alkaline component and that, therefore, the claim was clear under Article 84 EPC.

Furthermore, they submitted with respect to the third auxiliary main claim that Tables I and II of the patent in suit clearly showed that the reason for the storage instability of the detergent blocks was the increase of the water content due to the presence of sodium metasilicate.5H₂O or sodium perborate monohydrate. Moreover, they submitted that in accordance with this third auxiliary main claim the unsuitable embodiments as specified in Examples 2 and 3 were properly disclaimed.

Finally, they defended the admissibility of the fourth auxiliary main claim essentially by emphasising (i) that it was evident from the proceedings that they had good reasons to believe that the previously submitted main claims were formally acceptable, (ii) that this fourth auxiliary main claim was a bona fide attempt to overcome the formal objections raised, (iii) that it was clearly based on the originally filed patent application, and (iv) that in view of the examples of the patent in suit the functional feature provided sufficient instructions to achieve the result as claimed without undue burden.

XIII. The Appellants requested that the decision under appeal be set aside and that the patent be maintained on the basis of the new main claim, or respectively of the

auxiliary main claim or second auxiliary main claim or third auxiliary main claim or fourth auxiliary main claim, all as submitted at the oral proceedings on 1 April 1998.

The Respondents requested that the appeal be dismissed.

XIV. At the conclusion of the oral proceedings the Board's decision was pronounced.

Reasons for the Decision

Admissibility of the appeal

1. The Appellants were party to the proceedings before the first instance as required by Article 106 EPC, and are persons adversely affected by the decision under appeal for the purpose of Article 107 EPC, as their sole request was refused. Moreover, they fulfilled the requirements of Rule 64 and Article 108 EPC.
 - 1.1 In this context, the Board notes that to satisfy the requirements regarding grounds of appeal, it is according to the established jurisprudence of the boards of appeal sufficient to put forward requests and reasons why the decision under appeal, here to revoke the patent, should not apply to these requests.
 - 1.2 Moreover, the Board concurs with the considerations in decision T 0123/85 (OJ EPO 1989,336), in which it is stated in point 3.1.1 that

".....In requesting that his patent be maintained in a limited form the patentee is merely trying to delimit his patent to meet objections expressed by the European Patent Office or the opponents. However, the patentee does not, by virtue of such limitation, irrevocably surrender subject-matter covered by the patent as granted but not by the request as thus limited. In any case, as explained above, the patentee has no legal means for surrendering part of the patent as granted in this way. A patentee is thus quite entitled to amend his request after it has been made. He can make amendments to subject-matter limited at his request and can thus also reinstate his patent in the form in which it was granted."

and in point 3.1.2 that

"However, the Board has one reservation about the admissibility of amendments to the patentee's request in opposition proceedings. Such amendments must not constitute an abuse of procedural law (cf. also T 64/85 - 3.4.1 dated 19 January 1988 under 2.6)...."

In the present case, the Appellants presented product claims, which are similar to those already filed with the grounds of appeal, i.e. at a very early stage of the appeal proceedings. Therefore, in this respect, no abuse of the appeal procedure can reasonably be considered to have taken place.

1.3 Thus, in these circumstances, the Board concludes that the appeal is admissible.

New main claim

2. The first issue to be decided with respect to this request is whether the new main claim is allowable under Article 123(2) EPC.

2.1 The Appellants conceded that the patent application as originally filed did not comprise any explicit reference to the now claimed feature that the detergent block contained about 7.1% or less by weight of water. However, they argued that a skilled person, having regard to his common general knowledge, would have derived from the general description and the examples of the originally filed application that this feature was implicitly disclosed.

2.2 In this context, they argued in particular that the importance of the water content of detergent blocks as claimed was commonly known to the skilled person as can be derived from the cited documents (11), (12), (13), (21), (22) and (23) and that he would have interpreted the teaching of the originally filed patent application in view of this knowledge.

However, according to the established case law of the boards of appeal common general knowledge normally can be supported by textbooks and general technical literature only.

Moreover, after examination of these documents, the Board has reached the conclusion that they do not provide any incentive to the skilled person that the

water content of the formed detergent tablets and blocks, let alone the now claimed content of 7.1% or less by weight, could be relevant for the physical stability of compressed blocks. Since this point of view is actually supported by the Appellants' submissions in their statement of grounds of appeal as filed on 7 July 1997 defending with respect to each cited document that good tablets are obtained irrespective of the water content thereof (see in particular page 5, last paragraph to page 6, second paragraph, page 6, last paragraph to page 7, first paragraph, and page 7, last paragraph), it is not necessary to give further reasons for this finding.

Therefore, Appellants' argument in this respect cannot be accepted by the Board.

- 2.3 Moreover, the Appellants argued that the relevance of the water content is clearly indicated in the general description of the patent application as filed, since it discloses (i) that it has been found "that solid detergent blocks may be provided which constitute an even more concentrated product than the solid blocks obtained by hydration", (ii) that "after manufacture, the blocks should be packaged as soon as possible, owing to their hygroscopic nature", and (iii) that "the blocks obtained were then stored in a closed container" (see page 3, lines 12 to 16, page 6, lines 1 to 3, and page 7, lines 32 and 33).

However, a skilled person would only derive from these passages that compressed detergent blocks may contain less water, i.e. a lower amount of a non-effective

component, than the prior art cast solid blocks and that the hygroscopic solid products must be packaged in such a way that moisture uptake is prevented.

In this context, the Board observes that the patent application as originally filed essentially teaches that the disadvantage of the prior art cast detergent blocks, namely the difficulty of incorporating bleaches in them, owing to the incompatibility of bleach systems with the caustic components of the blocks and the elevated temperatures used in the manufacturing process of the blocks, can be removed (see page 2, line 35 to page 3, line 4, and page 4, third paragraph). This teaching does not relate at all to optional physical stability problems of the products.

Therefore, in the Board's judgment, the general part of the original patent application does not provide any information regarding the influence of the water content on the physical stability of the detergent blocks.

- 2.4 Furthermore, it is the Boards position that also from the Examples 1 to 5 of the originally filed patent application showing in two cases an unsatisfying physical stability (Examples 2 and 3), alone or in combination with the disclosure of the description, no particular evidence of the effect of the water content on the physical stability of the blocks becomes evident.

In this context, the Board observes that the use of a significant amount of 30.5% by weight of sodium tripolyphosphate. $6H_2O$ in accordance with Example 1 instead of **water-free** sodium tripolyphosphate in

accordance with Example 5 does not show any effect on the physical stability (see Table II of the patent in suit) and that the compositions of the physically unstable blocks of the Examples 2 and 3 not only differ from the composition of Example 1 in that they contain 10.0% by weight sodium metasilicate.5H₂O and 10.0% by weight sodium perborate monohydrate, respectively, but also by the presence of 2.0% by weight Dequest 2041 and 3.0% by weight TAED (only in Example 3) and considerably different amounts of NaOH (see Table I).

2.5 Finally, the Board notes that according to the originally filed patent application the detergent blocks may comprise a high amount of sodium triphosphate.6H₂O as a builder, namely up to 70% by weight (see page 4, second paragraph, Claims 3 and 5, and Examples 1 and 5), giving a clear incentive to the skilled person that in order to provide good detergent blocks the water content thereof was not relevant.

2.6 Therefore, the Board concludes that the new main claim comprising the feature that the detergent block contains about 7.1% or less by weight of water does not comply with the requirements of Article 123(2) EPC.

Auxiliary main claim

3. This claim contains the same new but not originally disclosed feature that the detergent block contains about 7.1% or less by weight of water. Thus, this claim is also not allowable under Article 123(2) EPC for the same reasons given already in relation to the new main claim.

Second auxiliary main claim

4. This claim has the provision that the alkaline agent is substantially free of water.
- 4.1 The first issue to be decided with respect to this claim is whether or not it is allowable under Article 123(2) EPC.
- 4.2 The Appellants argued in this respect that the provision in question is supported by the originally filed patent application, since this discloses that the detergent blocks contain an alkaline agent, such as sodium or potassium hydroxide, -metasilicate or -carbonate, and because the blocks as claimed are formed by compressing granular components (see page 4, lines 6 to 9, and page 5, lines 18 to 21).

However, as is commonly known to the skilled person and supported by Annex 7 filed by the Appellants regarding sodium metasilicate, said alkaline agents comprise **both water-free and hydrated solid forms**.

Moreover, as indicated above with respect to the main request, neither the originally filed patent application, nor the documents cited by the Appellants provide any information whatsoever regarding the influence of the water content on the physical stability of compressed detergent blocks.

Therefore, in the Board's judgment, the use of a substantially **water-free** alkaline agent **as such** is not

supported by the originally filed patent application.

- 4.3 Thus, the Board concludes that the second auxiliary main claim does not meet the requirements of Article 123(2) EPC too.

Third auxiliary main claim

5. This claim has the proviso that the alkaline agent excludes sodium metasilicate.**5H₂O** and sodium perborate **monohydrate**.

- 5.1 Concerning this claim, the Appellants submitted that in accordance with the established jurisprudence of the boards of appeal this proviso is allowable, because subject-matter of the present patent in suit is to be excluded which - as follows from the Examples 2 and 3 of the patent in suit - does not solve the technical problem underlying the patent in suit consisting in providing physically stable detergent blocks.

- 5.2 However, in view of the fact that despite the Appellants' submissions that compressed detergent blocks **must have a water content of 7.1% or less by weight** in order to show a satisfactory physical stability, the present claim does not exclude the use of **high amounts up to 70% by weight** of sodium triphosphate.**6H₂O** as a builder and **high amounts up to 80% by weight** of sodium metasilicate.**9H₂O** as an alkaline agent, which would result in products having a water content of greater than 7.1%, it is clear that this proviso does not ensure a water content of less than 7.1% and so does not solve the alleged technical problem.

5.3 Therefore, the Board concludes that the third auxiliary main claim is not acceptable under Rule 57a EPC, since the amendment cannot be regarded as removing any ground for opposition.

Fourth auxiliary main claim

6. This claim, which was filed at the end of the oral proceedings before the Board, comprises as an essential **functional feature** the proviso "that the type and amount of the components of the concentrated block are selected such that when the concentrated block is stored in a closed container for a period of three months at 20° or 30°C the physical appearance is unchanged".

6.1 The Appellants argued that this late request was admissible, because (i) it represents a bona fide attempt to remove the objections regarding the preceding main claims as put forward during the oral proceedings, (ii) it does not introduce a fresh case since it relates to the same essential feature, namely a proper control of the water content in the detergent blocks in order to provide a satisfying physical stability, (iii) this amended claim is clearly supported by the description of the application as filed and therefore allowable under Article 123(2) EPC, and (iv) the functional feature in this claim is permissible in accordance with the established case law of the boards of appeal, since it provides instructions which, in view of the Examples 1, 4 and 5 listing physically stable products and the Examples 2 and 3 listing less stable products, are

sufficiently clear for the skilled person to put into practice the invention without undue burden, if necessary with reasonable experiments involving only routine trials.

6.2 In this context, the Board notes that according to the established case law of the boards of appeal important factors regarding the admissibility of late filed amended claims are whether or not such claims are obviously allowable and whether or not assessing their validity would lead to an unjustified procedural delay.

6.3 In accordance with the functional feature of the present main claim the **type** and the **amount** of the components of the block **must be selected in such a way that the physical stability of the detergent blocks as defined is achieved.**

However, having regard in particular to the fact that according to the Appellants' submissions in relation to the previous main claims a water content of the blocks of 7.1% or less by weight is an essential feature in order to obtain physically stable blocks, whereas - as indicated above - this can nowhere be derived from the patent in suit, the Board is unable to assume that the specification of the patent in suit as a whole provides a sufficiently clear instruction to a skilled person how to select the proper components in the proper amounts in order to achieve the desired stability without undue burden. Thus, the fourth auxiliary main claim does not meet the requirement of support of the description under Article 84 EPC; it actually is an unjustified generalisation from some quite specific examples, namely Examples 1, 4 and 5. Moreover, in view of the fact that said essential feature in order to obtain physically stable blocks - as indicated above - can nowhere be derived from the patent application as filed too, the alleged invention has not been sufficiently disclosed as required under Article 83 EPC.

In this context, the Board notes that the requirements of Articles 83 and 84 EPC give effect to the same legal principle that the patent monopoly should be justified by the technical contribution to the art (see e.g. T 409/91, OJ EPO 1994, 653).

- 6.4 Thus, the fourth auxiliary main claim is clearly not allowable as not satisfying the provisions of Articles 83 and 84 EPC, and is not allowed into the proceedings in order to avoid an unjustified procedural delay.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

E. Görgmaier

A. Nuss