PATENTAMTS

OFFICE

BESCHWERDEKAMMERN BOARDS OF APPEAL OF CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:

(A) [] Publication in OJ

(B) [] To Chairmen and Members

(C) [X] To Chairmen

(D) [] No distribution

DECISION of 12 August 2004

Case Number: T 0942/01 - 3.3.6

Application Number: 94923580.8

Publication Number: 0686186

IPC: C11D 1/00

Language of the proceedings:

Title of invention:

Detergent compositions comprising high active enzyme granulates

Patentee:

THE PROCTER & GAMBLE COMPANY

Opponent:

GENENCOR INTERNATIONAL INC. NOVOZYMES A/S UNILEVER N.V.

Headword:

Detergent/PROCTER

Relevant legal provisions:

EPC Art. 123(2)(3), 54, 56

Keyword:

"Admissibility of amendment - yes: allowable reintroduction of subject-matter wrongfully deleted during the examining proceedings"

"Novelty - yes"

"Inventive step - no: obvious to try commercially available products recommended for detergents in order to provide further detergent compositions"

Decisions cited:

Catchword:



Europäisches **Patentamt**

European **Patent Office** Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0942/01 - 3.3.6

DECISION

of the Technical Board of Appeal 3.3.6

of 12 August 2004

Appellant: THE PROCTER & GAMBLE COMPANY

(Proprietor of the patent) One Procter & Gamble Plaza

Cincinnati, Ohio 45202 (US)

Representative: TER MEER STEINMEISTER & PARTNER GbR

Patentanwälte

Mauerkircherstrasse 45 D-81679 München (DE)

Respondents: GENENCOR INTERNATIONAL INC.

(Opponent I) 925 Page Mill Rd.

Palo Alto

CA 94304-1013 (US)

Representative: Kremer, Simon Mark

Mewburn Ellis LLP

York House 23 Kingsway

London WC2B 6HP (GB)

(Opponent II) NOVOZYMES A/S

Krogshoejvej 36

DK-2880 Bagsvaerd (DK)

Representative: Wichmann, Hendrik, Dr.

Patentanwälte

Isenbruck Bösl Hörschler Wichmann Huhn

Postfach 86 08 80 D-81635 München (DE) (Opponent III) UNILEVER N.V.

Weena 455

NL-3013 AL Rotterdam (NL)

Representative: Kan, Jacob Hendrick, Dr.

Unilever N.V.
Patent Division
P.O. Box 137

NL-3130 AC Vlaardingen (NL)

Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 21 June 2001 revoking European patent No. 0686186 pursuant

to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Krasa

Members: G. Dischinger-Höppler

J. H. Van Moer

- 1 - T 0942/01

Summary of Facts and Submissions

- I. This appeal is from the decision of the Opposition Division to revoke European patent No. 0 686 186 relating to detergent compositions comprising high active enzyme granulates.
- II. Three notices of opposition had been filed against the granted patent, wherein the Opponents sought revocation of the patent on the grounds of Article 100(c) EPC since the then pending amended claims contained subject-matter which extends beyond the content of the application as filed (Article 123(2) EPC) and Article 100(a) EPC for lack of novelty and lack of inventive step (Articles 52(1), 54(2) and 56 EPC. The oppositions were based inter alia on the following documents

D2: EP-A-0 381 397,

D3: EP-A-0 509 787,

D12: Novo Nordisk product publication B429g and

D13: Novo Nordisk product publication B157g.

During the opposition proceedings, the Patent Proprietor filed an amended set of three claims under cover of the letter dated 21 January 2000, the only independent Claim 1 reading:

"1. Granular detergent composition having a density of 800 g/l or more comprising enzyme granulates, characterized in that said enzyme granulates are

- 2 - T 0942/01

present at a level of less than 20 g/l detergent composition and the concentration of high alkaline protease in the granulate is at least 2% by weight."

- III. In its decision, the Opposition Division held that the amended claims fulfilled the requirements set out in Articles 123(2) and (3) and 54 EPC. Their subjectmatter was, however not based on an inventive step in view of D3 as the closest prior art since high alkaline protease granules containing more than 2% wt of the enzyme were commercially available at the priority date of the patent in suit. It was further not inventive in view of D13 as the closest prior art since it was known from D3 how to obtain highly concentrated detergent compositions.
- IV. This decision was appealed by the Patent Proprietor (hereinafter Appellant) who filed experimental data in relation to the claimed subject-matter. The Opponents (hereinafter Respondents) filed submissions in reply and the following further documents
 - D31: R.V. Scowen and G. J. Welch in A.R. Baldwin,

 "Second World Conference on Detergents", Looking

 Toward the 90's, AOCS, 1987, and
 - D32: E. Smulders et al., in Tenside Surf, Det. 34 (1997) 6, pages 386 to 392.

They further referred to

- 3 - T 0942/01

- D33: E. Smulders et al., "Laundry Detergents Household Laundry products" in the online version
 of the 6th edition of Ullmann's Encyclopedia of
 Industrial Chemistry.
- V. Upon requests made by all parties, oral proceedings before the Board of Appeal were held on 12 August 2004.
- VI. The Appellant, orally and in writing, submitted the following arguments:
 - The feature concerning the upper limit of the amount of enzyme granules in the detergent composition was an essential feature and had obviously been deleted inadvertently from the claims and description as granted. The amendment made to the claims by reinstating that feature into Claim 1 was based on the application as filed as required by Article 123(2) EPC and restricted the scope of protection conferred by the claims as granted in accordance with Article 123(3) EPC. The deletion of the feature in question during the examining proceedings was not an abandonment of subject-matter.
 - The claimed subject-matter was novel in view of the cited prior art.
 - It was apparent from the experimental data that the claimed composition solved the technical problem of overcoming the negative impact of enzyme granulates on the physical appearance of the detergent composition while maintaining the

- 4 - T 0942/01

same wash performance. However, this technical problem was not recognised in the art.

Therefore, the claimed subject-matter was not obvious in view of cited prior art. In particular, D3 and D13 taught away from the claimed subject-matter since D3 recommended substantially higher amounts of enzyme granules and D13 actually disclosed a doubling of the amount of enzyme granulates when going from traditional to compact heavy duty detergents.

VII. The Respondents submitted the following arguments:

- The feature concerning the amount of enzyme granulate in the detergent composition had been abandoned during the examining proceedings. Its reintroduction into Claim 1 was, therefore, not permissible under Article 123(3) EPC and under the aspect of legal certainty.
- The subject-matter of Claim 1 was anticipated by the disclosure of any of D2, D3 or D13.
- The claimed subject-matter was obvious in view of D3 or D13 since it was known in the art that the enzyme granules were dark in colour and that for densified detergent powders non-functional ingredients should be removed. Further, protease granules having an enzyme concentration above 2% were commercially available and sold for application in detergents.

- 5 - T 0942/01

- The Appellant's test report was artificial and irrelevant with respect to the claimed subjectmatter.
- VIII. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the claims filed with letter of 21 January 2000.

The Respondents request that the appeal be dismissed.

Reasons for the Decision

- 1. Amendments (Article 123 EPC)
- 1.1 Present Claim 1 differs from Claim 1 as granted by the presence of the term "said enzyme granulates are present at a level of less than 20 g/l detergent composition and".

This term does not add subject-matter which extends beyond the content of the application as filed since it is explicitly mentioned in Claim 1 of the application as filed. The requirements of Article 123(2) EPC are therefore met.

Since Claim 1 as granted does not specify the amount of enzyme granulates in the detergent composition, this feature does also not extend the protection conferred by the claims as required by Article 123(3) EPC, but rather restricts it.

These facts were not contested by the Respondents.

- 6 - T 0942/01

- 1.2 However, one of the Respondents objected to the amendment under Article 123(3) EPC with the argument that the deletion of the feature in question during the examination proceedings from the claims and the description amounted to an implicit abandonment of the particular subject-matter contained therein since the deletion did not arise from objections raised by the Examining Division but was made voluntarily. In particular, there was no reason to delete the feature completely from the description in order to adapt the latter to the amended claims. Moreover, third parties would have realised from the patent as granted that it was hopelessly invalid and that there was no possibility for it to be maintained. They could, in no case, have expected from the patent as granted an amendment as presently made to Claim 1, i.e. the reintroduction of the deleted feature. Therefore, the amendment adversely affected third parties.
- 1.3 First of all, it has to be noted that no statement can be found in the files of the pre-grant proceedings explicitly expressing the Appellant's intention to abandon the feature in question. Whereas the Appellant, in its reply to the examining division dated 22 July 1996 commented on the wording of the new claims submitted under cover of this letter, it did not even mention the omission of this feature from the new claim let alone express a respective waiver nor was the description adapted accordingly. Such an adaptation by the Appellant occurred only in January 1997 in reply to a respective request of the examining division in a communication dated 10 October 1996.

- 7 - T 0942/01

In view of this sequence of procedural steps, the Appellant's way of acting cannot be construed as implicitly corroborating the deletion of the feature in question so that it amounted to a waiver in this respect, as argued by one of the Respondents.

- 1.4 However, the Board has also considered whether the Respondent's further arguments all in fact dealing with the issue of legal certainty could support the existence of a bar hindering the Appellant to remedy a deficiency under Article 123(2) EPC in the patent in suit (see 1.5.1 below).
- 1.5 Apart from the fact that Article 123 EPC does not address the question of abandonment but merely that of added subject-matter in the sense that any amendment must not extend either beyond the content of the application as filed or the protection conferred by the claims as granted, the Respondent's argument is not convincing for the following reasons:
- 1.5.1 According to the application as filed, the amount of the enzyme granules in the detergent composition is an essential feature of the invention since it is originally disclosed as necessary for the solution of the technical problem stated in the application as filed, i.e. to keep the negative impact of the enzyme granules on the whiteness of the detergent composition low (page 4, second full paragraph and paragraph bridging pages 5 and 6). This was confirmed by both, the Appellant and the Respondents.

The Board concludes, therefore, that the deletion of that feature during the examining proceedings violated the provisions of Article 123(2) EPC since it resulted in a patent covering subject-matter originally not covered, namely detergent compositions containing enzyme granules in amounts not only below 20 g/l but also of 20 g/l and above.

Hence, the scope of protection has been broadened during the examining proceedings by adding subject-matter originally not contained. In the Board's opinion, such broadening cannot be considered as an abandonment of subject-matter.

1.5.2 It is a principle in patent law (see e.g. G 1/93, OJ EPO 1994, 541, reasons No. 11) that a patent cannot be maintained unamended in the opposition proceedings if a violation of Article 123(2) EPC has occurred during the examining proceedings. In the present case, the Respondents, during the opposition proceedings, correctly objected under Article 123(2) EPC to the deletion of the feature in question and the Appellant consequently reacted by cancelling the deletion, i.e. by reintroducing the deleted feature into Claim 1. Such a cancelling of unallowable amendments during the opposition proceedings is normally possible under the provisions of the EPC except where the unallowable amendment is a so-called "limiting extension", so that its cancellation would extend the protection conferred by the patent and, therefore, violate the requirements of Article 123(3) EPC (G 1/93, headnote I.). Such a situation is the basis for decision T 1149/97 (OJ EPO, 2000, 259, reasons Nos. 6.1.13 and 6.1.14) which was cited by the Respondents. However, this decision does

not apply to the present case which deals with an unallowable extension only (see 1.1 above).

1.5.3 Further, the assumption made by one of the Respondents that any amendments of a patent during the opposition proceedings must be based on the patent as granted finds no counterpart in the EPC and would be questionable if its content extends beyond that of the application as filed.

Actually, Article 69 EPC, referred to by the Respondent in this respect, excludes added subject-matter from the scope of protection conferred by a patent by stating that "the European patent as granted or as amended in opposition proceedings shall determine retroactively the protection conferred by the European patent application, in so far as such protection is not thereby extended".

1.5.4 The Board agrees that the reintroduction of the originally disclosed limiting feature concerning the amount of enzyme granules may be unexpected for those considering only the patent as granted. It does not, however, adversely affect third parties due to its limiting effect with respect to the claimed subjectmatter. Finally, the Board does not accept the argument that the right of third parties is affected merely for the reason that they presume a particular outcome of opposition and appeal proceedings from the content of patent as granted.

- 10 - T 0942/01

1.6 The Board concludes, therefore, that the amendments made to the claims consist in an allowable deletion of subject-matter wrongfully added during the examining proceedings and comply with the requirements of Article 123(2) and (3) EPC.

2. Novelty

An objection of lack of novelty has been raised in view of D2, D3 and D12.

2.1 D2 discloses in Examples 1 to 3 a granular detergent composition having a density of about 800 g/l and comprising less that 20 g/l, i.e. less than 2.5% wt based on the detergent composition, of Savinase® of T grade which is a high alkaline protease (see patent in suit, page 4, line 24) in granular form (see D13, page 5, right-hand column). The concentration of the protease within the enzyme granulates is not explicitly mentioned in D2. However, Savinase® 6T is specifically used in Examples 2 and 3 of D2.

According to the Respondents, Savinase® 6T contains about 1.5% wt of protease. It was argued that the concentration of the protease in the granules as expressed in Claim 1 of the patent in suit of "at least 2% by weight" had to be interpreted to range from 1.5% wt to 2.5% wt since the figure "2" as used without any decimals resulted from a rounding off and was not more precise from the technical point of view.

Therefore, the claimed subject-matter covered the compositions of Examples 2 and 3 of D2 and was anticipated by those.

- 11 - T 0942/01

It is well established case law that the addressee of a patent claim is a person skilled in the relevant art, in the present case a person working in the filed of detergent systems and, in particular, a person being familiar with detergent compositions comprising enzymes and with the parameters used in this technical field.

The Board agrees that in practice figures given for concentrations (and in fact for any parameter) must always be construed within a margin of error which depends on the measuring technique normally applied by a skilled person taking into account the degree of accuracy required in the particular technical field. The skilled person would therefore understand the present claims accordingly. However, the Respondents have not provided any evidence that an error margin of plus/minus 0.5% wt was there the accepted degree of accuracy.

However, information having a bearing on the issue at stake can be gained from the commercially available Savinase® preparations. Savinase® is a registered trade name covering different protease products, inter alia, different T-grades, i.e. protease granulates such as 4.0T, 6.0T and 8.0T (see list of products on page 7 of D12; handwritten numbering). It has not been argued, let alone shown by evidence, that Savinase® 6T mentioned in D2 was a different product to Savinase® 6.0T mentioned in D12. It is, further, undisputed that the protease concentration in these products can be calculated from the specific activity of the Savinase® enzyme and corresponds to 1.01% wt for Savinase® 4.0T, 1.52% wt for Savinase® 6.0T and 2.03% wt for Savinase® 8.0T on the basis of a specific Savinase® activity of

- 12 - T 0942/01

395 KNPU/g as indicated in the patent in suit (page 4, line 27).

In the present case it has to be considered that the difference in the theoretic enzyme concentration of adjacent members of the commercially available Savinase® granulate range is only about 0.5% wt. Therefore, it is not plausible at all that an acceptable error margin for the enzyme concentration could be as large as plus/minus 0.5% wt. Such an error margin would not allow the skilled person to reliably distinguish adjacent members of the product range of Savinase® granulates because of the large overlap of enzyme concentrations which, however, was not alleged by the Respondent let alone proved.

Thus, in the absence of respective evidence, the Board cannot accept that the term "at least 2% wt" used in Claim 1 of the patent in suit has to be construed as covering the concentration in Savinase® 6T.

The Board, therefore concludes that D2 does not directly and unambiguously disclose detergent compositions containing enzyme granulate, the latter having a concentration of high alkaline protease as claimed.

2.2 D3 refers to highly concentrated granular heavy duty laundry detergent compositions and teaches that the concentrates may, *inter alia*, be obtained by minimising the amount of non-functional ingredients (page 2, lines 3 to 15 and 24 to 29).

- 13 - T 0942/01

D3 concerns, in particular, compositions having a bulk density of at least 600 g/l and up to 1200 g/l and containing an enzyme (page 3, lines 14 to 19, page 5, lines 23 to 25). Commercially available protease enzymes which are suitable in the compositions are said to have activity in the pH range of 4-12. They are preferably selected from the subtilisins Maxatase® and Alcalase® or from the proteases having a maximum activity in the pH range of 8-12 like Esperase® and Savinase® (page 6, lines 41 to 49). The amount of proteolytic enzymes in the composition may range from 0.001 to 10% wt, preferably 0.01 to 5 %wt, depending upon their activity (page 6, lines 52 to 53). Example 1 specifies a composition having a bulk density of 900 g/l containing 1 g Savinase® in granular form per 118 g composition (note that 1% Savinase is added together with 17% other ingredients to a 100% base powder composition; see also Example 2). Hence, the composition contains 0.85% wt of Savinase® corresponding to 7.65 g/l. A particular type of granular Savinase® is not specified in D3.

By referring to D12, the Respondents alleged that Savinase® 8T was commercially available at the time of D3 and argued that given the information that non-functional ingredients have to be avoided, it was evident that the term "Savinase®" in Example 1 referred to Savinase® 8T which was more concentrated in protease enzyme than Savinase® 4T or 6T.

It has to be noted that D12 was published after the priority date of D3. This document is, therefore, not suitable to prove that Savinase[®] 8T was commercially available at that time. Quite apart from that, the

- 14 - T 0942/01

Respondents' argument is, in the Board's opinion, not convincing since there is nothing on file showing that the composition of Example 1 in D3 would not result in a product of excellent quality and good washing and bleaching performance as indicated in the example (page 8, lines 56 to 57) if the Savinase® used was of 4T or 6T grade. It would have been the Respondent's burden to prove that the quality of the product of Example 1 of D3 was inevitably bound to the using of Savinase® having a concentration of protease of at least 2% wt.

The Respondents further argued that the claimed subject-matter did not fulfil the criteria for selection inventions. By referring to Savinase® in general any type of commercially available Savinase® was included in the teaching of D3. Therefore, there was an overlap between the parameters for the bulk density and the type and amount of enzymes to be used according to Claim 1 of the patent in suit and the corresponding ranges disclosed in D3 on pages 5 and 6.

However, apart from the missing evidence for the existence of Savinase® granules containing at least 2% wt of protease at the priority date of D3, the claimed subject-matter fulfils the concept of individualisation in that it refers to compositions specifically containing granules of high alkaline protease, i.e. protease having activity at pH 8-12, in combination with a particular protease concentration whereas the compositions of D3 may contain protease granules having activity at lower pH, down to 4, such as Alcalase® and Maxatase®, and with undefined protease concentration (page 6, lines 41 to 49).

- 15 - T 0942/01

The Board, therefore, concludes that D3 does not anticipate a composition comprising enzyme granulate containing high alkaline protease in an amount of at least 2% wt.

2.3 D13 discloses on the first page (hand-written page number 5) a formulation for compact type heavy duty detergent compositions comprising 0.6 to 1.5% of Durazym® 6.0T or Esperase® 6.0T. The parties agreed that Durazym® 6.0T and Esperase® 6.0T were granulates containing high alkaline protease in a concentration of above 2% wt, but that no values for the bulk densities of these compositions were mentioned in D13.

However, the Respondents argued that, at the priority date of the patent in suit, the term "compact" denoted bulk densities of 800 g/l and higher. Reference was made to D3 and D31 to D33 in this respect.

This argument is not convincing for the following reasons:

It is true that D3 discloses detergent compositions having densities of 650 to 1200 g/l (Claim 7), but it refers to those as "concentrated" or "highly concentrated" (page 2, lines 3 to 15 and page 5, lines 21 to 25). It does not use the term "compact" so that no definition of that term can be derived from D3.

The same applies to D31, published in 1987, which also mentions merely concentrates as far as it relates to bulk densities, (page 9, left-hand column). It is true that this document shows that bulk density in detergent compositions was increasing between 1981 and 1985 from

- 16 - T 0942/01

about 470 g/l to about 680 g/l. It does not, however, show that this trend continued in a manner to result necessarily in at least 800 g/l for products delivered in 1991, the publishing year of D13.

D32 was published in 1997, i.e. after the priority date of the patent in suit. It defines compact detergent compositions to have a bulk density of 600 to 900 g/l as compared to traditional detergent compositions having densities between 500 and 650 g/l (page 387, Table I). D32 further mentions that there exists a second generation of compact detergents called "supercompact" (page 388, left-hand column, lines 7 to 14 and Figure 4) for which a definition can be found in D33, published in 2002, i.e. also after the priority date of the patent in suit, namely that supercompact detergents or second generation compact detergents are those having bulk densities between 800 to 1000 g/l.

Consequently, by referring to compact detergent compositions but not to supercompact detergents, D13 does not unambiguously disclose compositions having a bulk density of at least 800 g/l.

- 2.4 The Board, therefore concludes that the subject-matter of Claim 1 is not anticipated by any of D2, D3 or D13 but is deemed to be novel in accordance with Article 54(1) and (2) EPC.
- 3. Inventive step
- 3.1 The patent in suit relates to detergent compositions which are highly concentrated detergent powders or so-called "compact detergents" (page 2, lines 3 to 9).

- 17 - T 0942/01

Such concentrated compositions are said to be known in the art, e.g. from D3 which discloses detergent powder compositions having a bulk density of above 600 g/l, most preferably around 850 g/l, and containing 0.001 to 10% wt of proteolytic enzymes, depending on their activity (page 2, lines 40 to 41, and 52 to 55; page 3, lines 15 to 17).

According to the patent in suit, it has been found that higher levels of enzyme granulate have a clearly negative impact on the whiteness of the finished product. This is, in particular, a problem relevant for compact compositions since, the more concentrated a composition will be, the more enzyme granulate has to be added in order to achieve the same wash performance (page 3, lines 25 to 27).

- 3.2 The technical problem to be solved by the claimed subject-matter consisted, therefore, in providing a compact granular detergent composition having a bulk density of at least 800 g/l and containing enzyme granulates which composition, while maintaining its detergency performance, does not suffer from the negative impact of the enzyme granulate on the whiteness of the finished product (page 3, lines 18 to 19).
- 3.3 The Appellant argued that this problem had been solved by the claimed subject-matter as had been shown by the experimental data, but never been recognised before in the prior art. The claimed subject-matter was, therefore, not obvious, either prima facie or from the prior art on file. In particular D3 and D13 which were chosen by the Opposition Division and the Respondents

- 18 - T 0942/01

as the closest prior art taught away from the claimed subject-matter in that D3 referred to the completely different problem of improving bleaching performance and suggested levels of enzyme granulate of up to 10% wt and D13 suggested to increase the level of enzyme granulate by a factor of 2 to 2.5 when going from traditional to compact type detergent compositions.

In the Appellant's opinion, there was no guidance in the art for a skilled person to use granulates with a protein concentration of at least 2% wt irrespective of the fact that the granulates were commercially available at the priority date of the patent in suit since the skilled person could not be directed to the claimed composition without having knowledge of the technical problem underlying the patent in suit.

- The Board agrees with the Appellant insofar as none of the documents on file mentions the particular problem of avoiding the negative impact of enzyme granules on the whiteness of granular detergent compositions having a bulk density of at least 800 g/l. However, there is prior art on file such as D3, specifically referred to in the patent in suit with respect to the problem to be solved (page 3, lines 15 to 20), which actually refers to compositions having such high density and containing enzymes (page 2, lines 52 to 55). The Board agrees, therefore, with the Respondents and the above reference in the patent in suit that D3 qualifies as a suitable starting point for the assessment of inventive step.
- 3.5 Of particular relevance with respect to the claimed subject-matter is the composition described in Example 1 of D3 since it differs from the composition

- 19 - T 0942/01

of Claim 1 only in that it does not explicitly refer to a composition wherein the amount of protease in the enzyme granulate is at least 2% wt (see 2.2 above).

3.6 The patent in suit does not contain any evidence concerning the merits of the claimed composition in view of Example 1 of D3, let alone evidence showing that the above stated technical problem on which the Appellant relies is solved in view of this particular composition. Nor does the experimental evidence filed during appeal proceedings since the data provided therein are based on comparative compositions containing the enzyme granules in a high surplus of 80 g/l as compared with the claimed composition (less than 20 g/l) or with the composition of Example 1 of D3 (7.65 g/l; see 2.2 above). The Board wishes to note in this context that it would have been the Appellant's burden to provide such evidence given the fact that D3 is referred to in the patent in suit as the starting point for the invention (3.4 above) and that the patent in suit was revoked by the Opposition Division because of lack of inventive step.

In the absence of such evidence, the technical problem credibly solved by the claimed subject-matter, therefore boils down to the provision of a further granular detergent composition having a bulk density of at least 800 g/l and containing less than 20 g/l of high alkaline protease granulates.

3.7 It remains to be decided whether, in view of the available prior art documents, it was obvious for someone skilled in the art to solve this technical problem by the means claimed, namely by using enzyme

- 20 - T 0942/01

granulates containing the protease in an amount of at least 2% wt.

- 3.8 The Appellant has not contested that such granulates are known in the art and are even commercially available under the trade names Savinase® 8.0 T. Durazym[®] 6.0 T and Esperase[®] 6.0 T as is evident from D12 (page 7). Further, D12 being a commercial brochure of Novo Nordisk A/S concerning its product range of detergent enzymes (title) and setting out the above enzyme granulates for use in detergent powder (see Table concerning the application of the enzymes in the detergent industry on the first page), it is evident that these granulates were actually commercially offered at the priority date of the patent in suit for use in detergents including granular detergents. This is corroborated by D13, another Novo Nordisk leaflet, wherein the above enzyme granulates are explicitly suggested for a compact type heavy duty detergent formulation (page 5).
- 3.9 Therefore, the Board concludes that a person skilled in the art, in the expectation of success, would have used Savinase[®] 8.0 T, Durazym[®] 6.0 T and Esperase[®] 6.0 as the enzyme granulate in Example 1 of D3 to provide a further granular detergent composition. The skilled person would thus arrive in an obvious manner at the claimed subject-matter.
- 4. For these reasons the Board finds that the subjectmatter of Claim 1 is not based on an inventive step and
 does not comply with the requirements of Articles 52(1)
 and 56 EPC.

- 21 - T 0942/01

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Rauh P. Krasa