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**Datasheet for the decision
of 25 April 2018**

Case Number: T 2141/15 - 3.3.06
Application Number: 05715860.2
Publication Number: 1733016
IPC: C11D3/22, C11D3/50, C11D7/26
Language of the proceedings: EN

Title of invention:

GRANULATE FOR USE IN A CLEANING PRODUCT AND PROCESS FOR ITS
MANUFACTURE

Patent Proprietors:

- 1) Unilever N.V.
- 2) Unilever PLC

Opponent:

Henkel AG & Co. KGaA

Headword:

Granulate for detergent composition / UNILEVER

Relevant legal provisions:

EPC Art. 52(1), 54, 56, 123(2)
RPBA Art. 12(4)

Keyword:

Late-filed evidence - admitted (no)

Amendments - added subject-matter (yes) - Main Request - added
subject-matter (no) - First Auxiliary Request

Novelty - (yes) - First Auxiliary Request

Inventive step - (yes) - First Auxiliary Request

Decisions cited:

Catchword:



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Case Number: T 2141/15 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 25 April 2018

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
18 September 2015 concerning maintenance of the
European Patent No. 1733016 in amended form.**

Composition of the Board:

Chairman	L. Li Voti
Members:	G. Santavicca
	J. Hoppe

Summary of Facts and Submissions

- I. The appeal by the Opponent (Appellant) lies from the decision of the Opposition Division concerning maintenance of **European patent 1 733 016** in amended form according to the claims of the First Auxiliary Request filed at the oral proceedings before the Opposition Division.
- II. The set of seven claims according to the upheld First Auxiliary Request comprises independent Claims 1, 5, 6 and 7 reading as follows (compared to the corresponding claims as granted, amendments made apparent by the Board):

"1. A granulate for use in a particulate cleaning product, the granulate consisting of granules which comprise:

*(a) at least 20% by weight of granulation auxiliary selected from water-soluble **non-acid** crystalline saccharide solids; and*

(b) at least 0.1% by weight of a core/shell encapsulated perfume and

(c) optionally, one or more other ingredients."

"5. A process of manufacturing a granulate according to any preceding claim, for use in a particulate cleaning product, the process comprising granulating in a mechanical granulator, components (a), (b) and (c) to form said granules."

"6. A detergent composition comprising a granulate according to any one of claims 1 to 4 from 0 wt% to 30 wt% of a linear alkylbenzene sulphonate surfactant and from 10 to 70% by weight of a detergency builder by weight of the total particulate cleaning product."

"7. A detergent composition comprising a granulate according to any one of claims 1 to 4 and from 10 to 95% by weight of softening material by weight of the total particulate cleaning product."

Dependent Claims 2 to 4 relate to particular embodiments of the claimed granulate.

III. The patent in suit had been opposed on the grounds of lack of novelty and inventive step (Article 100(a) EPC). A further ground of opposition, under Article 100(c) EPC, namely added subject-matter, was raised after the summons to oral proceedings.

The following items of evidence were *inter alia* relied upon:

D1: EP 1 632 281 A1;
D2: US 2004/0071742 A1;
D5: WO 97/11151 A1;
D7: Pietsch, W. "Size enlargement by Agglomeration", Wiley 1991, pages 10-18.

IV. The Opposition Division decided that the late filed ground of opposition under Article 100(c) EPC was admissible and prejudiced the maintenance of the patent as granted. However, the patent amended according to Auxiliary Request 1 filed at the oral proceedings complied with the EPC. In particular, the invention was sufficiently disclosed, and the claimed subject-matter was

- based on the application as filed,
- clearly defined,
- novel over each of D1 to D5, as well as
- inventive over D5 taken as the closest prior art under consideration of the further prior art cited.

V. With its statement setting out the grounds of appeal, the Opponent/Appellant submitted five new documents labelled D10 to D14.

The Appellant maintained objections of added subject-matter, lack of novelty over D1 or D11 (allegedly corresponding to D2) and lack of an inventive step over D5, taken alone, or in combination with common general knowledge and/or D12, as well as over D12, taken alone or in combination with D5.

VI. With its reply dated 3 June 2016 the Respondent defended the patent in the amended form upheld by the Opposition Division (Main Request) but filed eight sets of amended claims as First to Eighth Auxiliary Requests. It also contested the admissibility of D10 to D14.

VII. Claim 1 according to the First Auxiliary Request reads as follows (amendments to Claim 1 as granted made apparent by the Board):

"1. A granulate for use in a particulate cleaning product, the granulate consisting of granules which comprise:

*(a) at least 20% by weight of granulation auxiliary selected from **non-acid** water-soluble crystalline saccharide solids; and*

*(b) at least 0.1% by weight of an ~~core/shell~~ encapsulated perfume, **in the form of perfume microcapsules comprising a core of carrier material impregnated with a perfume, the impregnated core being coated with a friable coating, and***

(c) optionally, one or more other ingredients."

Claims 2 to 7 remain unchanged with respect to the Main Request (Point II, *supra*).

VIII. In a communication (dated 27 March 2018) issued in preparation for oral proceedings, the Board summarised the case history up to this point in time and expressed its provisional opinion on salient issues of the case, *inter alia*:

- that the new items of evidence D10 to D14 did not appear to be admissible, because they had been filed unjustifiably late to backup the presentation of fresh cases in appeal proceedings,
- that Claim 1 of the Main Request, comprising the feature "*core/shell*", did not appear to have a direct and unambiguous basis in the application as filed, so that the Main Request did not appear to be (formally) allowable,
- that the First Auxiliary Request appeared to be admissible, and its claims formally allowable, and that its claimed subject-matter appeared to be novel over D1 and, if admitted, D11. Also, that D5 was the closest prior art document for assessing inventive step.

IX. Oral proceedings were held on 25 April 2018.

X. The **Appellant (Opponent)** requested that the decision under appeal be set aside and that the patent be revoked.

The **Respondent (Patent Proprietor)** requested that the appeal be dismissed (main request), alternatively that the decision under appeal be set aside and that the patent be maintained on the basis of one of the sets of claims according to auxiliary requests 1 to 8, filed with the letter dated 3 June 2016.

XI. The arguments of the Appellant of relevance for the present decision can be summarised as follows:

Amendments to Appellant's case in appeal proceedings

Late filed documents D10 and D12-D14 were relevant items of evidence filed in reaction to the findings in the decision under appeal on novelty and inventive step. D10 evidenced that perfume microcapsules did not necessarily have a core/shell structure. D11 was a European patent application corresponding to the not pre-published D2 (a US document), which was thus citable against novelty under Article 54(3) EPC. D12 evidenced that the use of perfumed core/shell microcapsules, as mentioned in the patent in suit, were well known before the priority date. D13 evidenced that molasse, containing 50 wt.% saccharose, was a usual binder in agglomeration, thus was relevant against Claim 3 and in combination with D12. D14 confirmed the publication date of D13. At least when used to backup D5, D12 and D13 were not late filed. Therefore, all of these documents should be admitted.

Main Request - Amendments

As a basis in the application as filed for the feature of Claim 1 at issue "core/shell", the Respondent relied on the feature "perfume microcapsules" as allegedly being synonymous with "core/shell", as allegedly shown on page 3 of the original application. However, the invoked original application disclosed only that "perfume microcapsules" or a specific "core/shell structure" thereof, as a preferred embodiment of the "perfume microcapsules", could be used. As a "core/shell structure" was only disclosed in connection with a preferred embodiment, the original disclosure invoked

did not represent a basis for the generalized "core/shell" structure of Claim 1. Thus, Claim 1 did not comply with Article 123(2) EPC.

First Auxiliary Request

Amendments

The further objections raised under the ground of opposition of Article 100(c) EPC in the opposition proceedings, and not accepted in the decision under appeal (i.e. that there was no direct and unambiguous basis in the application as filed for the intermediate generalizations arising in Claim 1 at issue from the feature "saccharide" and from the omission of the feature "temperature sensitive" in respect of the encapsulated perfume, and in Claim 4 from the ranges specified therein), still applied against the claims of the First Auxiliary Request, for the reasons as set out in the written proceedings. Consequently, this claim request was not (formally) allowable.

Novelty

The claimed subject-matter upheld by the Opposition Division still lacked novelty over D1 (EP 1 632 281 A1) (Article 54(2) EPC) for the reasons as set out in the written proceedings.

Inventive step

D5 and in particular example I thereof was the closest prior art for assessing inventive step.

The claimed subject-matter was distinguished therefrom, if at all, only by the presence of perfume

microcapsules, as there was no further difference between the claimed granule comprising a plurality of ingredients and the particles disclosed by D5 and comprising perfume, zeolite and sugar, which was to be considered as a granulate. This was in particular also apparent from D7, page 15, according to which it was generally known that a granulate could be obtained, not only by agglomeration (size enlargement), but also by size reduction, as in said example I of D5. The patent itself acknowledged (paragraph [0035]) that perfume microcapsules were known, *inter alia* as also acknowledged in D5. Claim 1 did not differentiate between microcapsules with shells of same or different chemical composition than the granulation material.

As to the effects alleged by the Respondent, such as a reduced segregation of the particles, they did not depend on the presence of the microcapsules, but on the characteristics of the granules. The distinguishing features as such did not provide any additional unexpected effect.

As D5 (page 15, line 24 ff) too disclosed that its particulates reduced segregation, and as no comparative examples over D5 had been provided, let alone in the patent, thus in the absence of any effect whatsoever imparted by the distinguishing feature, the technical problem was to be formulated as the provision of alternative granulates.

The claimed subject-matter was obvious in view of, respectively:

- D5 alone (which itself mentioned that encapsulated perfumed core/shell particles were known and that despite the availability of different particle structure, further particle structures were still sought-for, i.e. D5 did not teach away from the use of

known perfume microcapsules), whereby D5 disclosed that the glassy material fulfilled both functions of enclosing (shelling) the disclosed perfume loaded zeolite (in the following **PLZ**) and of agglomerating the particles, so that, in the absence of any chemical difference between the perfume particulates, the use of microcapsules for the PLZ like in the known core/shell microcapsules of the prior art acknowledged in D5 or in the patent in suit would have been obvious, or - D5, taken as the closest prior art, in combination with common general knowledge.

XII. The arguments of the Respondent of relevance for the present decision can be summarised as follows:

Procedural aspects

Amendments to Appellant's case

Late filed documents D10 to D14, and the fresh case based on them, could and should have been filed earlier. Thus, the amended Appellant's case submitted with the statement setting the grounds of appeal was not admissible under Article 12(4) RPBA.

In any case, if admitted, these late filed documents lacked any relevance to novelty or inventive step.

Main Request

The claims according to the Main Request complied with Article 123(2) EPC. In particular, in Claim 1 thereof, the contested feature "core/shell" found basis in the application as filed (page 7, line 30, to page 8, line 30). The original disclosure on page 3, lines 22 ff, line 23 in particular, showed that "perfume

microcapsules" were decisive for the invention. The feature "perfume microcapsule" was synonymous with "core/shell structure containing a perfume", whereby the shell surrounded and protected the perfume. The feature "perfume microcapsules" was consistently mentioned throughout the application as filed, such as on page 7, line 28, wherein the perfume microcapsule in a preferred embodiment had a friable coating. Therefore, Claim 1 complied with Article 123(2) EPC.

First Auxiliary Request

Amendments

The claims had been further amended by replacing the term "*core/shell encapsulated perfume*" with the more specific term "*encapsulated perfume in the form of perfume microcapsules comprising a core of carrier material impregnated with a perfume, the impregnated core being coated with a friable coating*".

The more specific definition was based on page 7, lines 33-35, of the application as filed.

The further still maintained objections against Claim 1, such as the absence of the feature "*temperature sensitive*", were unfounded, as the claimed subject-matter was originally disclosed as such (page 7, line 35, to page 8, line 2).

Claim 1 thus complied with Article 123(2) EPC.

Novelty

Concerning D1, there was no evidence that the disclosed tableting was preceded by granulation, e.g. when mixing. Moreover, the combination of Examples 2 and 7 with paragraph [0084] to arrive at the claimed subject-matter was not a direct and unambiguous disclosure. In

particular, there was no unambiguous disclosure of how much starch was used, nor of any particulate slurry mixed in with the detergent.

Hence, the claimed subject-matter was novel over D1.

Inventive step

D5 was the closest prior art. However, the claimed subject-matter was distinguished thereby not only by the presence of the perfume microcapsules, but also in that features (a) and (b) of Claim 1 defined distinct components of the granulate, and that no granulate by agglomeration was disclosed by D5. Instead, D5 disclosed that the prepared mass comprising the PLZ completely enrobed by the glassy material was to be grounded to a desired particle size. Thus, the shell of the PLZ and the granulation aid was the same material in D5. The perfume microcapsules of the invention, already comprising their own shell, needed not be completely enrobed by the auxiliary granulation. Hence, the function of shell for the PLZ could not be assigned to the continuous glassy matrix disclosed by D5. D7 did not disclose common general knowledge in the detergents field, and was not relevant to the claimed granules by agglomeration.

The effects of these distinguishing features were manufacturing advantages (e.g. the use of fluidized beds) over the art acknowledged in paragraphs [0007] and [0008] of the patent as well as consumer advantages, as a qualitatively different granule was provided, which, in accordance with paragraph [0111] of the patent, was free-flowing, had excellent solubility, low friability, and which showed no segregation when added to the packaged detergent composition.

Admittedly, no comparative data had been provided in the patent application. However, the Opponent too had

not submitted any comparative test showing better results for the particles of D5.

The technical problem should thus be formulated as the provision of different granules providing a better result in terms of perfume microcapsules segregation.

As to obviousness, no invoked document, alone or in combination, would have led the skilled person to the claimed invention, for the following reasons:

D5 acknowledged previous attempts to incorporate perfume into granules, including the therein mentioned core/shell encapsulation, but taught that these products were unsuitable and suggested alternatives. Thus, the existence of perfume microcapsules as defined in feature (b) does not imply that it would be obvious to automatically apply them to replace the PLZ. In D5 the perfume itself was encapsulated by the saccharide (zeolite-adsorbed perfume encased in saccharide), i.e. was not a granule as required by Claim 1, and took the form of a particulate which might be added as such to a detergent formulation. The disclosure of D5 on page 15 presented the function of agglomeration of the PLZ as an incidental bonus only.

Thus, D5 taught away from the use of agglomerated core/shell perfume microcapsules, it did not prefer the core/shell particles having a friable, water-soluble coating. It rather preferred glassy particles including perfume loaded zeolites coated with a soluble matrix of saccharide. The claimed subject-matter was not obvious over D5.

Reasons for the Decision

Procedural aspects

Amendments to Opponent's case

1. Documents D10 to D12 have not been dealt with in the decision under appeal, because they have been filed only in the appeal proceedings. These documents are patent applications, hence do not concern common general knowledge, let alone in dispute.
- 1.1 The justification adduced for their late filing is a reaction to the findings in the decision under appeal on novelty and inventive step.
However, the fact that D11 (a European patent application), at variance with the not pre-published D2, cited during opposition, is citable under Article 54(3) EPC cannot justify its belated filing. Indeed, this fact confirms that D11 should have been filed earlier during the opposition proceedings, instead of D2 (which is not prior art), to backup the attack against novelty.
Similarly, D12, invoked as an alternative closest prior art, could and should have been filed earlier.
Moreover, as both D5 - page 2, third sentence - and the patent in suit, paragraphs [0004], [0035] and [0036], acknowledge that perfumed encapsulated microcapsules were known, the filing of D12 does not appear to be a necessary reaction to the decision under appeal.
D10 has not been invoked as being relevant against novelty or inventive step, but to back up the raised argument under Article 123(2) EPC that encapsulated perfume particles are not necessarily encapsulated in core/shell structures.

D13 concerns common general knowledge but has been cited against a dependent claim, in combination with D12. D14 is merely intended to prove the publication of D13. Thus, its admissibility depends on that of D13.

1.2 As regards these newly filed items of evidence, it is immediately apparent to the Board that at least the filing of D11 and D12, and the amended/new case presented on their basis (lack of novelty over D11 and lack of inventive step over D12, alone or taken as the closest prior art) is not a legitimate reaction to the decision under appeal. Thereby, the Appellant is not seeking to supplement its case presented during the opposition proceedings on the basis of, respectively, D2 and D5, in reaction to the decision under appeal, in order to reinforce its lines of attacks already taken before the Opposition Division. The Appellant is indeed presenting a fresh case, based on new items of evidence and on relevant new arguments therefrom, which in fact amounts to a new opposition. D11 and D12 and the case based on them go beyond the indication of facts, evidence and arguments presented in the notice of opposition.

D10 appears also not to be relevant since the evaluation of the compliance of amended claims with Article 123(2) EPC is based on the application documents as originally filed. Additional documents not cited therein are thus to be disregarded.

1.3 Already for these reasons, the amendments to Opponent's case based on (late filed items of evidence) D10 to D12 are not admitted into the proceedings (Article 114(2) EPC and Article 12(4) RPBA).

1.4 Therefore, the Board maintains the provisional opinion as set out in its communication and decides not to

admit documents D10 to D12 into the proceedings (Article 12(4) RPBA).

- 1.5 As regards document D13 (and D14, filed only as proof of the publication date of D13), the Board, in its communication, had indicated that it appeared to relate to common general knowledge which might be in dispute, thus appeared to be admissible for consideration. However, D13 and D14 were only invoked by the Appellant in combination with D12 as regards inventive step. Hence, as D12 is not admitted in the proceedings, D13 and D14 will not be dealt with in this decision.

Main Request

New ground of opposition under Article 100(c) EPC admitted into the proceedings by the Opposition Division

2. In its statement setting out the grounds of appeal, the Opponent maintained that the claimed subject-matter as granted still goes beyond the content of the application as filed, *inter alia* in so far as in Claim 1 as granted the inclusion of the term "*core/shell*" had no basis in the originally filed application.

- 2.1 On this issue, the Board's decision is as follows:

- 2.1.1 The basis invoked by the Respondent in support of the feature "*core/shell*" is page 7, line 30, to page 8, line 30. However, the relevant passages thereof (e.g. page 7, lines 33-35; page 8, lines 10-11 and lines 25-30) either refer to specific (*core/shell*) structures, made up of perfumed impregnated carriers and water insoluble and/or friable coating, or to other structures, not necessarily of the *core/shell* type.

2.1.2 Thus, the generalized feature "core/shell" of Claim 1 has no basis as such in the application as originally filed, let alone in the combination as now claimed.

2.1.3 Consequently, the requirements of Article 123(2) EPC are contravened, and the ground of opposition under Article 100 (c) EPC prejudices the maintenance of the patent on the basis of the claims of the Main Request.

2.2 Therefore, the Main Request is not allowable.

Auxiliary Request 1

Admissibility

3. The admittance of this request into the proceedings has not been contested by the Appellant. Auxiliary Request 1 essentially corresponds to the then pending Auxiliary Request 1 filed with letter dated 19 June 2015 (renumbered Auxiliary Request 2 during the oral proceedings before the Opposition Division), apart for the addition of "non-acid", as done for the claims upheld by the Opposition Division. Therefore, the Board sees no reason to hold this request inadmissible under Article 12(4) RPBA.

Allowability of the amendments

4. In Claim 1, feature (b) has been amended to replace the objected feature "core/shell encapsulated perfume" with the feature "encapsulated perfume in the form of perfume microcapsules comprising a core of carrier material impregnated with a perfume, the impregnated core being coated with a friable coating".

- 4.1 The amendments made thus consist in a concretization of the feature "*core/shell ...*".
- 4.2 As to the requirements of Article 123(2) EPC, the replacement is fairly based on the original disclosure on page 7, lines 33-35, having the same wording. Hence, the amendments do not result in an extension beyond the original contents of the application as filed.
- 4.3 The amendment made overcomes the objection raised by the Appellant against the generalized feature "*core/shell*" under the ground of Article 100(c) EPC, dealt with *supra*.
5. As to the further objections raised by the Opponent against the claimed subject-matter as granted under the ground of Article 100(c) EPC, and which still apply against the claims of Auxiliary Request 1, the Board has decided that these further objections do not prejudice maintenance of the patent in the amended form according to Auxiliary Request 1, for the following reasons:
 - 5.1 Objection against the term "*water-soluble crystalline saccharide solids*"
 - 5.1.1 According to the following statement in the application as filed (page 5, lines 27-28), namely:... these - i.e. water-soluble non acid organic crystalline solids - "are selected fromwater-soluble crystalline mono-, oligosaccharides, water-soluble polysaccharides", and thereby all of the saccharides (also summarised in line 33 "saccharides") have been disclosed originally as being suitable for use as water-soluble non acid organic crystalline solids.

5.1.2 The concretization of the feature "*non-acid water-soluble organic crystalline organic solids*" (as defined in Claims 1 and 7 as originally filed) into "*non-acid water-soluble crystalline saccharide solids*" (as now defined) is thus fairly based on the application as originally filed.

5.1.3 Therefore, this concretization does not contravene the requirements of Article 123(2) EPC.

5.2 Objection against the omission of the feature "temperature sensitive" in definition (b) of the perfume.

5.2.1 According to the statement in the application as filed (sentence bridging pages 7 and 8, namely "perfumes in general and perfume microcapsules in particular can be considered as functional cleaning materials, especially temperature sensitive functional cleaning materials", perfumes - even in form of microcapsules - are inherently temperature sensitive materials. Also, upon considering original Claims 7-9, it is not apparent that the concretization of the original feature "*temperature sensitive functional cleaning material*" without repeating "*temperature sensitive*", can contravene the requirements of Article 123(2) EPC, because the "temperature sensitive" feature appears to be in this case implicit.

5.2.2 Hence, the omission of the feature "temperature sensitive" in definition (b) of the perfume does not contravene the requirements of Article 123(2) EPC.

5.3 Objection against the range of 30 to 95 wt% of granulation auxiliary in Claim 4 of Auxiliary Request 1 (identical to Claim 4 as granted)

- 5.3.1 The objected feature is based on the original application as filed (page 6, last paragraph) and also corresponds to Claim 6 as originally filed.
- 5.3.2 Thus, the amendment does not contravene the requirements of Article 123(2) EPC.
- 5.4 Consequently, the First Auxiliary Request is formally allowable.

Auxiliary Request 1 - Patentability issues

Claim 1 - Construction

6. The general principles applicable in the construction of the claims are established in the case law of the Boards of Appeal of the EPO (8th edition, II.A.6.1, 6.3.1, 6.3.4, 6.3.6), in particular the skilled person, when considering a claim, should rule out interpretations which are illogical or which do not make technical sense, thus should construe the claim with a mind willing to understand.
- 6.1 Claim 1 according to Auxiliary Request 1 (see Point VII, *supra*) contains the following features:

A granulate ..., the granulate consisting of granules which comprise:

- (a) at least 20% by weight of granulation auxiliary selected from non-acid water-soluble crystalline saccharide solids; and*
- (b) at least 0.1% by weight of an encapsulated perfume, in the form of perfume microcapsules comprising a core of carrier material impregnated with a perfume, the*

impregnated core being coated with a friable coating

6.2 At the oral proceedings before the Board it was in dispute whether Example I of D5 discloses granulates consisting of granules as claimed. In this respect, the Appellant invoked the general definition of D7 (page 15) (stating that a granule can result from a size enlargement or a size reduction operation), whilst the Appellant contended that D7 was not common general knowledge and invoked the definition given in the patent (paragraph [0019]) (which, like other paragraphs of the patent in suit, e.g. [0006] and [0007], appears to relate to granules obtained by a size enlargement operation).

Thus, the proper construction of Features (a) and (b) of Claim 1 is of utmost importance. In this respect, the position of the Board is as follows:

6.2.1 In the Board's view, features (a) and (b) comprise only conventional terms of art providing the following unambiguous technical teaching to the skilled reader:

- Feature (a) "*at least 20% by weight of granulation auxiliary selected from water-soluble non-acid crystalline saccharide solids*" defines the auxiliary material used in the formation of the granule by a granulation operation.
- Feature (b) "*at least 0.1% by weight of encapsulated perfume, in the form of perfume microcapsules comprising a core of carrier material impregnated with a perfume, the impregnated core being coated with a friable coating*" defines the encapsulated perfume which is agglomerated by means of the granulation auxiliaries in the agglomeration operation.

- 6.2.2 For the person skilled in the art these features define granulates comprising granules which are made up of perfume microcapsules, each comprising a core covered by a coating as defined, and agglomerated together (bound) by the granulation auxiliaries.
- 6.2.3 The claim merely specifies the minimum amounts of, respectively, auxiliary material and perfume microcapsules. Hence, depending on the amounts used and on the granule size, a microcapsule can be more or less covered by the binding granulation auxiliaries.
- 6.2.4 In any case, Claim 1 makes clear that the perfume microcapsules, with their particular construction, and the granulation auxiliary are **distinct** components of the granules. This also implies a distinction between the coating of the microcapsule and the granulation auxiliary.
- 6.2.5 Summing up, a granule as claimed can be represented by a structure comprising a plurality of microcapsules, made up of perfume material incorporated into a core material, which is covered by a coating material, bound together by the granulation auxiliary material, as a result of a granulation operation.

Novelty

7. In the decision under appeal, the disclosure of *inter alia* D1 was not found to be novelty-destroying for the subject-matter of Claim 1 of the Main Request. In particular, it was found:
- that D1 (see page 6, last four paragraphs) does not disclose a granulate as claimed.

- 7.1 In the appeal proceedings, the Appellant *inter alia* maintains
- that D1 (Claims 1 and 3, paragraph [0001], Examples 7 and 9) discloses all of the features of Claim 1, including a granulate,
 - that a granulation step occurs in fact inevitably when carrying out for example the mixing mentioned in Example 9 of D1, which is followed by a tableting step,
 - that a granulation step corresponds to the granulation preceding the tableting step mentioned in paragraph [0073] of the patent in suit.
- 7.2 The Board, however, reviewing the decision under appeal, and also considering the disclosure of D1, sees no reason to take a different stance. In particular, the Board notes the following:
- 7.2.1 Example 9 of D1 mentions that "The ingredients were mixed and tablets were prepared using a Frogeray(TM) tablet machine.". The Board understands therefrom that the ingredients encompass the "perfume encapsulated polymer powder" mentioned in Example 9 of D1, referring back to Example 7 thereof, and that the reference to a specific tableting machine implies direct tableting.
- In fact, there is no mention whatsoever of any granulation step, let alone one inevitably occurring. In this respect it has not been shown by corroborating evidence that the tableting with the machine used in D1 necessarily implies the formation of granules as claimed.
- As to the alleged reference to paragraph [0073] of the patent in suit, it deals with the tableting of *inter alia* already and separately formed granules as claimed into a final detergent composition.

Thus, D1 does not directly and unambiguously disclose the formation of granules as claimed.

- 7.3 Therefore, the subject-matter of Claim 1 at issue does not lack novelty over D1.

Inventive step

The invention

8. The present invention relates to granulates for use in particulate cleaning products such as laundry wash products, the granulates comprising an encapsulated perfume. The invention further concerns a method for making such granules (paragraph [0001] of the patent).

- 8.1 In particular, according to the patent (paragraphs [0007] and [0008]), the use of conventional granulation techniques to provide granulated adjuncts containing micro-encapsulated perfume leads to problems. For instance, the granulation of perfume microcapsules by spray-drying results in a poor particle size distribution with an undue proportion of fine materials in the product. This is undesirable because of the tendency for such a product to segregate. The high temperature involved can also damage the microcapsules, leading to perfume loss.

The closest prior art

9. In the decision under appeal, D5 was considered to be the most appropriate starting point for assessing inventive step.

- 9.1 The parties still consider the art disclosed in D5 as the closest prior art.

9.2 For the Board, considering the similarities in terms of problems addressed in the same technical field (e.g. the provision of particles containing agents, such as perfumes, useful for laundry and cleaning products), D5 appears to be the closest prior art, at least for the subject-matter of Claim 1.

9.3 In particular, for the Board, Claim 10 and Example I of D5 appear to disclose the closest embodiments for assessing inventive step.

The technical problem

10. In the decision under appeal (sixth paragraph on page 9), the technical problem over D5 was seen in the provision of encapsulated perfumes suitable for detergent compositions, in so far as no technical effect was associated with the distinguishing feature of Claim 1 over D5, i.e. a core/shell encapsulated perfume.

10.1 At the oral proceedings, the Appellant still considered the technical problem to consist in the provision of alternative granulates containing encapsulated perfume particles for use in detergent compositions.

10.2 The Respondent indeed alleged that the composition of Claim 1 provided a better result over that D5, because it concerned a different product, which enabled the perfume microcapsules to be less segregated in the composition.

10.3 However, the Board notes the following:
- in the formulation of the problem the application as filed (e.g. page 3, last two paragraphs) does not

mention any improvement (see also page 21, last three lines "to give a free-flowing powder with excellent solubility but low friability and which has no segregation risk when added to a standard detergent powder");

- Example 1 thereof does not represent a comparison over D5;
- D5 (e.g. page 15, penultimate paragraph) too mentions agglomeration of multiple perfumed particles to reduce dustiness and sifting at the bottom of the containers (hence, reduce segregation). Also, D5 does not appear to use "inorganic solid granulation auxiliaries", found to be disadvantageous by the patent in suit (paragraph [0015]); and
- no further comparative examples over D5 are available.

Therefore, the Board sees no reasons to accept that the technical problem be formulated in terms of improvement over D5, hence to deviate from the decision under appeal in this respect.

- 10.4 Consequently, for the Board, the technical problem can only be seen in the provision of further granulates for use in particulate cleaning products, the granules of which contain an encapsulated perfume.

The solution

11. The patent in the amended form according to Auxiliary Request 1 proposes as a solution therefor

"1. A granulate for use in a particulate cleaning product, the granulate consisting of granules which comprise:

- (a) at least 20% by weight of granulation auxiliary selected from non-acid water-soluble crystalline saccharide solids; and
- (b) at least 0.1% by weight of an encapsulated perfume, in the form of perfume microcapsules comprising a core of carrier material impregnated with a perfume, the impregnated core being coated with a friable coating."

Success of the solution across the whole breadth as claimed

- 12. It is not in dispute between the parties that the least ambitious technical problem as formulated under point 10.4, *supra*, is effectively solved across the whole breadth as claimed. The Board has no reason to take another stance.

Obviousness

- 13. It remains to be decided whether for the skilled person starting from Example I of D5, faced with the technical problem posed, the solution as claimed was obvious over D5, possibly considered in combination with common general knowledge (D7) or with the further prior art cited and admitted. More particularly, whether D5, alone or in combination with common general knowledge or admitted further prior art hints at a granule as claimed, comprising as a distinct component thereof encapsulated perfume in form of microcapsules as defined.

13.1 D5 taken alone

13.2 D5 (Claim 10) concerns a heavy-duty granular detergent composition comprising (A) from 0.1 to 10%, by weight of the composition, of a glassy particle, ... wherein said glassy particle has a size from 1 to 500

micrometers and comprises a perfume adsorbed on a zeolite and enrobed in carbohydrate glass, said carbohydrate having a Tg in the range from 50 to 200°C.

- 13.2.1 More particularly, Example I of D5 discloses a process of preparation of said glassy particles, comprising:
- the preparation of fragrance loaded zeolite (PLZ),
 - the preparation of a low moisture sucrose syrup (Tg 57°C),
 - the combination of PLZ and syrup in e.g. an extruder,
 - the glass particle formation/size reduction, e.g. by grinding and sizing to various particle sizes below the glass transition temperature, and
 - the combination of the particulate glass with a detergent base.
- 13.2.2 The function of the glass coating is detailed on page 15, lines 24-30. In particular, "In addition to its function of containing/protecting the perfume in the zeolite particles, the glassy particle also conveniently serves to agglomerate multiple zeolite perfumed zeolite particles into agglomerates having an overall size in the range of ...".
- 13.2.3 For the Board, D5 thus discloses the use of ground or sized particles comprising one or more perfume loaded zeolite enrobed by a common (matrix of) sucrose glass, which below 57° is friable. It is apparent thereby that the glassy material is used as agglomeration auxiliary material, which inevitably will also enrobe more PLZs into particles of the desired size.
- 13.2.4 Hence, the closest embodiments of D5 do not disclose a granule formed by agglomerating with agglomeration auxiliaries already formed (i.e. distinct) **perfume microcapsules comprising a core of carrier material**

impregnated with a perfume, the impregnated core being coated with a friable coating.

- 13.2.5 D5 (e.g. first paragraph on page 2) acknowledges that the use of perfume dispersed with a water-insoluble non-polymeric carrier material and encapsulated in a protective shell by coating with a water-insoluble friable coating material was known from US 5,066,419. In this respect, D5 does not disclose whether the known core-shell particles are added as such to the laundry composition or granulated at all. In fact, D5 departs from this prior art (paragraph bridging pages 3 and 4), and actually *inter alia* proposes (page 4, line 23 to page 5, line 21) glassy particles useful in laundry and cleaning products, comprising a perfume carrier material (preferably zeolite), on which the perfume is adsorbed, which is then coated with e.g. a carbohydrate, e.g. sucrose as done in example I.
- 13.2.6 Hence, D5 taken alone does not hint at granulating the acknowledged known perfumed microcapsules, hence at a granule as claimed, but teaches away from it.
- 13.3 D5 in combination with common general knowledge
- 13.3.1 The only item of common general knowledge invoked by the Appellant during the oral proceedings was D7, because it allegedly defined on its page 15 a granulate/granule as any kind of relatively coarse particulate matter which may be produced by size enlargement (as in the patent) or by size reduction (as in D5). Hence, to backup the argument that it would have been obvious to replace a granulate by size reduction with one by size enlargement.

13.3.2 The Respondent has contended that D7 did not represent common general knowledge, in so far the applicable definition for a granulate is given in the patent.

13.3.3 For the Board, even if D7 is seen as disclosing common general knowledge, D5 nevertheless teaches away from agglomerating, with the defined auxiliary material, the pre-formed perfume encapsulated core/shell structures, even by size reduction as stated above.

13.3.4 Hence, D5 supplemented by D7 still does not lead the skilled person towards the claimed solution.

13.4 D5 in combination with known microcapsules

Although D5 acknowledges the granulation of the known microcapsules of US 5,066,419, the document acknowledged in D5 has never been invoked in the proceedings. Hence, the Board does not need to make any decision thereon.

13.5 Concluding, for the Board D5 would not lead, not even in combination with common general knowledge, to the subject-matter of Claim 1 at issue.

13.6 Therefore, the subject-matter of Claim 1 at issue involves an inventive step. The same conclusion applies to Claims 2 to 7.

Conclusion

14. None of the grounds of opposition invoked prejudice the maintenance of the patent in the amended form according to the First Auxiliary Request, which thus complies with the requirements of the EPC and is allowable.

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 as amended according to auxiliary request 1, filed with the letter dated 3 June 2016, and a description to be adapted where appropriate.

The Registrar:

The Chairman:



D. Magliano

L. Li Voti

Decision electronically authenticated