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Datasheet for the decision of 14 September 2021

Case Number: T 2532/17 - 3.3.03

Application Number: 10779153.5

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Language of the proceedings: EN

Title of invention:
LAUNDRY SCENT ADDITIVE

Patent Proprietor:
The Procter & Gamble Company

Opponents:
Henkel AG & Co. KGaA
UNILEVER PLC/ UNILEVER N.V.

Relevant legal provisions:
EPC Art. 56
RPBA Art. 12(2), 12(4), 13(1)

Keyword:
Main request - inventive step (no) - obvious modification
Auxiliary requests not substantiated with the rejoinder -
Additional observations concerning the auxiliary requests (not admitted)

Decisions cited:
T 0939/92

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Case Number: T 2532/17 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 14 September 2021

Appellant: (Opponent 1)	Henkel AG & Co. KGaA Henkelstrasse 67 40589 Düsseldorf (DE)
Representative:	dompatent von Kreisler Selting Werner - Partnerschaft von Patent- und Rechtsanwälten mbB Deichmannhaus am Dom Bahnhofsvorplatz 1 50667 Köln (DE)
Appellant: (Opponent 2)	UNILEVER PLC/ UNILEVER N.V. A company registered in England and Wales under Company no. 41424 of Unilever House 100 Victoria Embankment/Weena 455 London Greater London EC4Y 0DY/GB /3013 AL Rotterdam/NL (GB)
Representative:	Moore, Elizabeth Ellen Unilever Patent Group Bronland 14 6708 WH Wageningen (NL)
Respondent: (Patent Proprietor)	The Procter & Gamble Company One Procter & Gamble Plaza Cincinnati, OH 45202 (US)
Representative:	Gill Jennings & Every LLP The Broadgate Tower 20 Primrose Street London EC2A 2ES (GB)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 25 September 2017 rejecting the opposition filed against**

European patent No. 2496679 pursuant to Article 101(2) EPC.

Composition of the Board:

Chairman	D. Semino
Members:	F. Rousseau
	R. Cramer

Summary of Facts and Submissions

I. The appeals lie from the decision of the opposition division, posted on 25 September 2017, rejecting the oppositions against European patent No. 2 496 679. The grounds for opposition invoked in two notices of opposition filed against the patent were lack of sufficiency of disclosure and lack of inventive step.

II. Claim 1 of the patent as granted read as follows:

"A unit dose of a fabric treatment composition comprising a plurality of pastilles, wherein each pastille comprises:

(a) from 80 % to 91 % by weight of said composition of polyethylene glycol, wherein said polyethylene glycol has a molecular weight from 5,000 to 11,000;

(b) from 2 % to 12 % by weight of said composition free perfume; and

(c) from 2 % to 12 % by weight of said composition of friable perfume microcapsule, wherein said friable perfume microcapsule comprises encapsulated perfume;

wherein each said pastille has a mass from 0.95 mg to 2 g; and

wherein said plurality of pastilles has a mass from 13 g to 27 g to comprise said unit dose."

III. The following documents were cited *inter alia* in the decision under appeal:

D2: WO 2008/009521 A1
D3: WO 2004/105811 A1
D8: WO 2009/071373 A1
D19: US 2008/0131695 A1
D20: Technical information on polyethylene glycols, brochure published by Clariant, 2007
D22: Technical Report.

IV. According to the reasons for the contested decision which are relevant to the appeal case:

(a) Document D19 which appeared to be the most promising starting point for the present invention was *prima facie* relevant and therefore admitted into the proceedings.

(b) The closest prior part was represented by the functionalized polyethylene glycol (hereafter PEG) based substrate described with Example III in Table B of D19.

(c) The fabric treatment composition of claim 1 as granted differed therefrom in (i) the molecular weight of the PEG which was from 5000 to 11000, (ii) the presence of 2 to 12 % by weight of free perfume in the composition and (iii) the mass of each pastille of the composition being from 0.95 mg to 2g.

(d) As the patent did not establish a technical link between these distinguishing features, those could be considered as a mere aggregation of features which could "be considered separate from each other".

(e) Having regard to experimental report D22 the objective problem solved by the molecular weight of the PEG was the provision of a scent additive product which had good storage stability and dissolution properties and showed an acceptable level of perfume release.

(f) Neither D19 itself, nor D2, D3 or D8 led the skilled person to incorporate into the substrate of the closest prior art a PEG with a molecular weight in the range of 5000 to 11000 while keeping the amount of PEG at a level of 80 % by weight in order to solve said problem.

(g) Concerning the level of free perfume, the problem solved by said feature was the provision of alternative scent additives. The skilled person would have considered to include free perfume into the substrate of the prior art, but would not have kept the level of PEG within the claimed range.

(h) As to the mass of the pastilles, the problem solved by the range defined in claim 1 was also the provision of an alternative. D19 however already taught the manufacture of substrates within that mass range.

(i) On that basis, it was not obvious for the skilled person starting from D19 to include PEG 8000 into the composition of Example III nor to include free perfume while maintaining the level of PEG at 80 % by weight to obtain a scent additive with good storage stability and good dissolution properties.

(j) Consequently, the subject-matter of the granted claims was inventive.

(k) The oppositions were therefore rejected.

V. The opponents 1 and 2 (appellants 1 and 2) lodged an appeal against the above decision.

VI. Appellant 1 submitted with their statement setting out the grounds of appeal the following document:

D23: Technical Data "Polyethylene glycol 4,000" (https://www.alfa.com/de/catalog/A16151/ retrieved on 29 January 2018)

VII. Appellant 2 submitted with their statement setting out the grounds of appeal the following documents:

D24: Temperature in Cars Survey, Russel Manning and John Ewing, RACQ Vehicle Technologies Department, 2009
D25: Technical report.

VIII. The patent proprietor (respondent) submitted with its rejoinder to the statement of grounds of the opponents (letter of 22 June 2018) first to fourth auxiliary requests, which corresponded to those submitted before the opposition division with letter of 24 July 2017. Claims 1 of those requests differed from that of granted claim 1 in the following manner:

First auxiliary request

Each pastille was defined to have a volume from 0.003 cm^3 to 0.15 cm^3.

Second auxiliary request

The friable perfume microcapsules were defined to encapsulate from 0.6 % to 4 % by weight of perfume based on the weight of the composition.

Third auxiliary request

In feature (a) the minimum amount of polyethylene glycol was defined to be 85 %.

Fourth auxiliary request

Each pastille had a mass from 0.95 mg to 125 mg.

IX. In preparation of oral proceedings scheduled to take place on 27 November 2020 the Board issued a communication dated 4 August 2020. The communication conveyed the Board's preliminary opinion regarding inter alia inventive step and lack of substantiation of the auxiliary requests.

X. As a consequence of the COVID-19 pandemic situation, oral proceedings before the Board were rescheduled.

XI. Additional submissions by the respondent on the substance of the case were submitted with letter of 3 December 2020.

XII. Appellant 1 provided additional submissions on the substance of the case with letter of 11 August 2021.

XIII. Oral proceedings before the Board were held by videoconference on 14 September 2021.

XIV. The appellants' submissions, in so far as they are pertinent, may be derived from the reasons for the decision below. They are essentially as follows:

(a) Formulation III of Table B of D19 was a suitable starting point for assessing inventive step.

(b) The flowability of the pastilles under storage conditions could not be taken into account for formulating the problem solved over the closest prior, as this effect was not achieved over the whole scope of claim 1 and in addition was not even implied by or related to the technical problem suggested in the application as filed.

(c) Faced with the problem of providing a perfume scent additive product which dissolves well in the wash and has an acceptable release of perfume, the skilled person having regard to the teaching of D19 alone or in combination with D20 would have arrived in an obvious manner at the subject-matter of claim 1.

(d) The subject-matter of the main request lacked therefore an inventive step.

(e) According to appellant 1 the auxiliary requests should not be admitted into the proceedings.

XV. The respondent's submissions, in so far as they are pertinent, may be derived from the reasons for the decision below. They are essentially as follows:

(a) A suitable starting point for assessing inventive step was Formulation III of Table B of D19.

(b) The skilled person would understand that flowability of the pastilles under the storage conditions used in experimental report D22 was a desirable effect for a perfume additive as described in the patent in suit.

(c) Whether or not an improved flowability was taken into account for the formulation of the problem solved over the closest prior art, the modifications of the various parameters necessary to arrive at the unit dose of claim 1 were not suggested by D19.

(d) The subject-matter of the main request involved therefore an inventive step.

(e) The auxiliary request should be admitted into the proceedings.

XVI. The appellants requested that the decision under appeal be set aside and that the patent be revoked. Appellant 1 further requested that the auxiliary requests not be admitted into the proceedings.

XVII. The respondent requested that the appeals be dismissed, or alternatively that the decision under appeal be set aside and that the patent be maintained in amended form according to any of the first to fourth auxiliary requests, all submitted with the reply to the statements of grounds of appeal.

Reasons for the Decision

Main Request

1. In agreement with the parties granted claim 1 is to be understood as defining a plurality of pastilles whose mass in total is in the range of 13 to 27 g, wherein each pastille has a mass from 0.95 mg to 2 g and their composition is defined to comprise amounts of ingredients in accordance with features (a) to (c) of claim 1.

Inventive step

Closest prior art

2. According to paragraph [0002] of the patent in suit there was a need to provide a perfume scent additive product to consumers that would provide freshness to laundry. Such a scent additive needed to be able to be applied by the consumer, independent of other laundry products, to achieve the desired scent level in a cost effective manner.

All parties agreed that the functionalized substrate described in Table B in paragraph [0216] of D19 under the heading "III" (hereafter substrate III) represented a suitable starting point for assessing inventive step. The Board has no reason to have a different view, since it can be understood from paragraphs [0002] to [0006] and [0009] of D19 that this document and particularly substrate III are conceived for the same purpose as the present invention, namely providing a perfume scent additive which gives freshness to the laundry.

3. The chemical composition of substrate III is described in Table B to comprise 80 % by weight of PEG whose molecular weight is not specified, 6,24 % by weight of perfume oil encapsulated in a PMC, which acronym designates a perfume microcapsule as indicated in paragraph [0051] of D19, 1,10 % by weight of an urea/formaldehyde resin which constitutes the material of the PMC wall (see also lines 8 and 9 of paragraph [0041]), 10,94 % by weight of water, the rest of the ingredients being formaldehyde scavenger, $MgCl_2$ and xanthun gum. D19 does not specify the shape or the size of substrate III.

Having regard to the nature of the material constitutive of their wall, namely a urea/formaldehyde resin, which is also used in the Example of the patent in suit (paragraph [0034] of the specification; foot note 1 of the Table), it is unchallenged that the PMC contained in substrate III are also friable PMC within the meaning of granted claim 1. Friable means in the context of PMC that such PMC attached to a fabric can be ruptured by the forces encountered when the fabric is manipulated by being worn or handled, thereby releasing the perfume contained in the capsule (D19, paragraph [0039]).

It is undisputed that D19, like the present invention, is based on the achievement of a dissolution of the functionalized substrate during the wash and/or rinse cycle in order to release the PMC in the wash and/or rinse water (paragraphs [0009], [0155] and [0175] of D19).

4. The parties were also in agreement that the definition of the product of granted claim 1 differs from that of substrate III in that:

(i) it is in the form of a unit dose consisting of 13 to 27 g of pastilles,
(ii) each pastille has a mass in the range from 0.95 mg to 2 g,
(iii) the molecular weight of the PEG is selected to be in the range of 5000 to 11000 and
(iv) the pastilles comprise 2 % to 12 % by weight of free perfume.

Problem successfully solved

5. Having regard to experimental report D22, the respondent reformulated the technical problem solved by the subject-matter of claim 1 over substrate III as the provision of a perfume scent additive product that dissolves well in the wash, provides for a beneficial scent experience to the user and has good flowability after storage. The appellants objected to the allowability of that formulation in so far as flowability after storage was concerned, arguing that this effect could not be taken into account, as it was not derivable from the application as filed.

5.1 *Flowability after storage*

5.1.1 According to established jurisprudence of the boards of appeal (Case Law of the Boards of Appeal of the European Patent Office, 9th edition, 2019, I.D.4.4.1), where a specific problem is identified in the description, the patentee, here the respondent, may be allowed to put forward a modified version of the problem if the issue of inventiveness has to be

considered on an objective basis against a new prior art that comes closer to the invention than that considered in the original patent application or granted patent specification. Since the problem objectively solved is the result actually achieved in relation to the closest state of the art, there is nothing to prevent the problem as first formulated from being modified as long as the spirit of the original disclosure of the invention is respected. A reformulation of the problem may be appropriate if an alleged effect of a described feature can be deduced by the skilled person from the application in the light of the prior art or if new effects submitted subsequently during the proceedings were implied by or related to the technical problem initially suggested. Before turning to this question, it is however appropriate in the present case to consider the experimental evidence and technical arguments submitted by the parties in relation to free flowing.

5.1.2 D22 is a technical report concerning among others the flowability of PEG based pastilles after storage at 50°C for 6 hours. D22 reports their flowability as a function of the molecular weight of the PEG. The pastilles are made of 88,11% by weight of PEG, 5,88 % by weight PMC slurry, 5,88 % by weight neat perfume and 0,13 wt % by weight of a dye solution. The three PEG employed in D22 have molecular weights of 4000, 9000 and 20000.

It is uncontested that D22 shows that the pastilles prepared with a PEG having a molecular weight of 9000 remained free-flowing after storage at 50°C for 6 hours whereas those prepared with a PEG having a molecular weight of 4000 stuck together, even to a great extent

after the fused mass of pastilles had been hit to break it into smaller pieces.

5.1.3 It is undisputed that it was known in the art, as illustrated by the data on page 8 of D20, that in the range of molecular weight tested in the experiments of D22 the solidification point of PEG slightly increases with its molecular weight. Whereas a solidification point of 53-58 °C is given for a PEG 4000, solidification points of 55-62 °C and 57-64 °C are given for PEG 10000 and PEG 20000, respectively. Appellant 2's submissions that PEG, like many polymers will start to become sticky on the outside of the particles, before they reach they solidification/ melting point was not disputed either.

5.1.4 D22 does not show what happens with pastilles prepared with a PEG having a molecular weight lower than 9000, in particular with a PEG having a molecular weight close to the lower limit of 5000 defined in granted claim 1, which is much closer to 4000 than 9000, i.e. much closer to a PEG resulting in pastilles which are not free flowing after storage at 50°C. Accordingly and taking into account the considerations regarding stickiness in the previous paragraph, it cannot be deduced from D22 that the pastilles in accordance with claim 1 are over the whole breadth of claim 1 free flowing when stored at that temperature. *A fortiori*, it cannot be expected that the pastilles in accordance with granted claim 1 would remain free flowing when stored at a temperature higher than 50°C, since higher storage temperatures are expected to induce stickiness also for PEG having higher molecular weight.

5.1.5 D25 is an experimental report using pastilles having a composition similar to that used in D22. Two PEG having

a molecular weight of 4000 and 8000 were tested. Appellant 2 has shown with D25 that pastilles made of PEG 4000 remained also free flowing after shaking when stored for the same period of time, but at a lower temperature, namely 40°C. This illustrates, as is already indicated in the above paragraph, that the ability of the pastilles in accordance with granted claim 1 to remain free flowing on storage depends on the storage temperature.

5.1.6 Turning now to the question whether the original disclosure of the patent in suit hinted at the achievement of free flowing particles when the pastilles are subjected to a temperature of 50°C, the original disclosure of the patent in suit, or even the patent in suit itself, is not concerned with any storage issues, let alone under certain time and temperature conditions associated as alleged by the respondent with a resulting lack of flowability of the pastilles when the PEG has a molecular weight below the lower limit of the range defined in granted claim 1. There is in particular no reason for the skilled person to consider that a specific temperature of 50°C was an issue for the present invention, when lower or even higher temperatures could have been equally considered, if to the benefit of the respondent one considered that the patent in suit was implicitly, e.g. in view of common general knowledge, concerned with storage issues. In any event storage of PEG based pastilles in relation to temperature has also not been shown to be an issue mentioned or implied by the teaching of D19.

For the same reasons and in the absence of any explanation or evidence as to why one would consider that a temperature of 50°C or around that value is known to the skilled person to be used for the handling

of PEG based pastilles, the respondent's argument that one would immediately recognise that sufficient flowability of the pastilles at said temperature is inherently relevant to the manufacture of the claimed product also fails to convince. Finally, the further indication by the respondent that the physical stability of the pastilles is addressed in paragraph [0020] of the specification is not relevant, as this passage does not refer to temperatures around 50°C as a cause for their possible instability, but to the potential use of optional additives to be comprised in the pastilles which therefore should be controlled.

5.1.7 As also indicated in above point 3, the disclosure of D19 related to substrate III is, like the original disclosure of the patent in suit, concerned with achieving dissolution of a functionalized substrate during a wash and/or rinse cycle in order to release perfume compounds. This document also has not been shown to address, even implicitly, the flowability of particles made of these functionalized substrate, let alone at a specific temperature.

5.1.8 It is therefore concluded that the flowability of the claimed pastilles after storage at 50°C or temperatures around that value is not implied by or related to the technical problem initially suggested. It cannot be deduced from the original disclosure of the patent in suit alone or in the light of the closest prior art. Under these circumstances, the flowability of the claimed pastilles after storage at 50°C cannot be taken into account for the formulation of technical problem solved over the closest prior art.

5.1.9 Last but not least, even if to the benefit of the respondent the flowability of the pastilles after

storage at 50°C were considered to be implied by the original disclosure, that effect which has not been shown to be achieved over the whole breadth of granted claim 1 for the reasons provided in above point 5.1.4 could not be taken into consideration on that basis alone.

5.2 *Dissolution of the pastilles during the wash and scent experience for the consumer*

5.2.1 It was not challenged that the ability of the pastilles to dissolve during a wash and/or a rinse cycle is implicit from the disclosure of the patent in suit, as the principle underlying the invention is that the PEG matrix minimizes free perfume diffusion, but dissolves well in water, which in particular results in the friable perfume microcapsules to deposit on the user's clothing (paragraphs [0010] and [0020] of the specification and corresponding passages in the application as filed on page 2, two last lines and page 6, lines 9-12). It is also unchallenged that the pastilles in accordance with granted claim 1 would dissolve well during a wash or a rinse cycle and as a consequence would release during a wash or rinse cycle both the free perfume and the friable perfume microcapsules contained in the functionalized substrate.

5.2.2 The Board, having regard to the molecular weight of the PEG making up the substrate of the claimed pastilles and the known water solubility of such polymers reported on page 9 of D20, has no reason to have a different opinion. This has been in addition confirmed with experimental evidence D22 (see "Wash Dissolution Study" and "Headspace Study" in points 3 and 4, respectively). On the other side, an improvement of

these properties with respect to substrate III of D19 has not been shown, nor has it been claimed by the respondent.

5.3 Accordingly, the Board concludes that the problem successfully solved by the subject-matter of granted claim 1 over substrate III of D19 is the provision of a perfume scent additive product which dissolves well in the wash or the rinse and has an acceptable release of perfume.

Obviousness of the solution

6. It remains to be decided whether the skilled person desiring to solve the problem identified above would, in view of the disclosure of D19, possibly in combination with other prior art documents or with common general knowledge, have modified the substrate III of D19 in such a way as to arrive at the product defined in granted claim 1.

Molecular weight of the PEG and units dose comprising pastilles having a mass from 0.95 mg to 2 g

6.1 As mentioned in above point 3 it undisputed that D19 aims at a complete dissolution of the binder material of the functionalized substrate, i.e. PEG for substrate III, during the wash and/or rinse cycle. According to paragraphs [0023] and [0024] suitable water soluble materials for that purpose are PEG with molecular weights of 4000 or 8000 and mixtures thereof. Moreover, considering the known water solubility of PEG over a broad range of molecular weights encompassing said values of 4000 and 8000 recommended in D19 (D20, page 9), it would have been obvious for the skilled person to take any PEG having a molecular weight as defined in

granted claim 1, in particular any PEG whose molecular weight is up to a value of 8000, in order to provide a perfume scent additive product which dissolves well in the wash or the rinse and as a consequence has an acceptable release of perfume.

The respondent submitted that the most preferred water solubility according to paragraph [0018] of D19 was at least 95 % and that the skilled person would rather select a substrate PEG having a molecular weight of 200 to 600, reference being made to pages 8 and 9 of D20 indicating the water solubility of PEG as a function of its molecular weight. D19, however, does not indicate that a water solubility of 95% is preferred. It is merely indicated that the water-soluble material has a water-solubility of at least 50 %, alternatively at least 75 %, or even at least 95 %. This argument therefore cannot convince. PEG having molecular weight in the range of 4000 to 12000 are indicated on pages 8 and 9 of D20 to have a water solubility comprised between 55 % and 53 %, i.e. a solubility in water as recommended in D19, in line with the recommendation in paragraph [0024] of D19 of using PEGs with a molecular weight of 4000 and 8000 as non-limiting examples of PEG.

As to the use of pastilles, it is confirmed in paragraph [0029] and Figure 1 of the specification that the term "pastilles" refers to granules obtainable by a pastillation process. D19 describes in its paragraph [0168] that the functionalized substrate can be in any form suitable to administer the article comprising said functionalized substrate into a wash and/or rinse cycle in a conventional washing machine. According to the same paragraph, the functionalized substrate is in unit dose form including tablets, pouches, capsules, beads,

and sachets. Functionalized substrates in the form of pastilles are not disclosed in D19, but the use of such particle shape for administering a wash additive embedded in a water soluble PEG substrate also comprising perfume in order to obtain among others a rapid release of the perfume additive is known from D2 (page 15, last full paragraph; page 2, 4th paragraph; paragraph bridging pages 3 and 4; page 4, first and second full paragraphs; last paragraphs of page 4; penultimate and last full paragraph of page 5; page 12, sixth and seventh paragraphs). On that basis the skilled person faced with the problem identified in above point 5.3 would have found it obvious to use functionalized substrates in the form of a unit dose of multiple pastilles whose binder material is a PEG having a molecular weight within the range defined in granted claim 1.

Having regard to the desire expressed in paragraph [0175] of D19 to completely dissolve the PEG within the wash or rinse cycle in order to release the scent additives and the information in said paragraph that thicker substrates are expected to take more time to dissolve in aqueous solution than thinner ones, it would have been also obvious for the skilled person that the mass of the pastilles had to be taken into account in order to adjust the speed of release of the additives contained in the PEG. The selection of a mass in the range of 0.95 mg to 2 g for the pastilles is considered to be the result of the above imperative, i.e. a size which allows for a suitable dissolution of the PEG matrix, which size can be determined by mere routine experimentation and is therefore obvious to the skilled person.

Composition of the pastilles

6.2 The appellants' argument that D19 teaches in paragraphs [0053] and [0098] to incorporate free perfume in addition to the perfume microcapsules is undisputed. According to said paragraph [0053] the perfume encapsulated in the PMC and the free perfume provide a total perfume loading level of from about 1 % to about 95 % by weight of the functionalized substrate. D19 does not comprise any limitation as to the proportion of perfume encapsulated in the PMC and free perfume.

Since the selections within the teaching of D19 of (i) the amount of free perfume defined in granted claim 1 and (ii) of an amount of encapsulated perfume as provided by the amount PMC defined in granted claim 1, have not been shown to be associated with any technical effect, it must be concluded that the use of the amounts of free perfume and PMC defined in granted claim 1 are arbitrary and therefore obvious measures for the skilled person seeking to solve the problem identified in above point 5.3. Having regard to the amount of PMC used for substrate III, the possibility to use less PMC and add free perfume while being in the ranges taught in D19 for both the free perfume and the encapsulated perfume would have been an obvious measure for the skilled person.

The respondent submitted that according to paragraphs [0053] and [0023] of D19 the most preferred total perfume loading was from 30 to 60 wt % and the most preferred amount of PEG was from 65 to 80 wt %, respectively. The respondent argued on that basis that D19 taught away from the present invention. This argument must fail, not only because those cited passages of D19 only concern possible embodiments

within the teaching of D19 without indication of any degree of preference, but also because the answer to the question as to what a person skilled in the art would have done in the light of the state of the art depends on the technical result the skilled person had set out to achieve (see T 0939/92, OJ EPO 1996, 309, reasons Nrs 2.4.2 and 2.5.3).

In the present case, having regard to substrate III the skilled person is merely seeking to provide a perfume scent additive product which dissolves well in the wash or the rinse and has an acceptable release of perfume, but not a product resulting in a higher level of perfume released during a wash or rinse cycle. The selection of any amount of free perfume and perfume encapsulated in the PMC providing a total perfume loading level within the range taught in paragraph [0053] of D19, e.g. amounts of free perfume as low as 2 % free perfume and amounts of perfume encapsulated provided by amounts of PMC lying at the lower part of the range defined in granted claim 1, constituted therefore an obvious solution to the problem posed.

Concerning the obviousness of using the amount of PEG defined in granted claim 1, that amount ranging from 80 % to 91 % by weight is almost fully encompassed by the amount taught in paragraph [0023] of D19, which explicitly describes levels of PEG up to about 90 %, alternatively up to 85 %, alternatively up to 80 % by weight. It goes without saying that the obvious measures of reducing the amount of PMC present in substrate III while adding a small amount of free perfume would have led the skilled person to use a higher level of PEG. It has to be noted in this context, as was stressed by appellant 2 during the oral proceedings, that the water present in substrate III of

D19 originates from the use of a PMC slurry for preparing the functionalized substrate. This is generally indicated in paragraph [0117] of D19 and more specifically in the experimental part of this document in paragraph [0211]. This is also reflected by the compositions of substrates I to III shown in Table B (paragraph [0216]) which all contain the same proportions of encapsulated perfume, capsule wall and water. Accordingly, starting from substrate III any substantial reduction of the amount of encapsulated perfume would be accompanied with a substantial reduction of the amount of water and capsule wall, allowing for the presence of at least 2 % by weight of free perfume and even more PEG. The respondent's argument that the skilled person modifying the closest prior art by adding free perfume to substrate III would have had to reduce the amount of PEG below the amount defined in granted claim 1 is therefore not convincing.

Accordingly, starting from substrate III of D19 the skilled person using in an obvious manner less PMC while adding a small amount of free perfume would have arrived thereby in an obvious manner at a functionalized substrate whose composition is in accordance with granted claim 1.

Mass of the plurality of pastilles

6.3 Finally, the skilled person, depending on the type of perfume selected, the desired scent experience and the amounts of free perfume and encapsulated perfume contained in the composition of the functionalized substrate, would have adjusted by routine experimentation the amount of pastilles to be contained in a unit dose. Accordingly, the use of 13 to 27 g of

pastilles for a unit dose was also obvious to the skilled person.

6.4 Consequently, starting from substrate III and faced with the problem of providing a perfume scent additive product which dissolves well in the wash or the rinse and has an acceptable release of perfume, the skilled person on the basis of the teaching of D19 would have considered the variables defined in granted claim 1 and varied them by mere routine experimentation, arriving thereby in an obvious way at unit doses falling within the ambit of granted claim 1.

6.5 The main request is therefore not allowable, as the subject-matter of its claim 1 does not involve an inventive step.

First to fourth auxiliary requests

7. The auxiliary requests having been filed before 1 January 2020, Article 12(4) to (6) RPBA 2020 does not apply (Article 25(2) RPBA 2020) and the question whether or not these auxiliary requests should be taken into account must be decided on the basis of Article 12(4) RPBA 2007 in combination with Article 12(2) RPBA 2007, the latter stipulating that the statement of grounds of appeal and the reply must contain a party's complete case.

7.1 Apart from identifying the modifications introduced into claim 1 of the first to fourth auxiliary requests, the respondent did not indicate with its rejoinder to the statements of grounds of appeal of the appellants how said modifications could overcome the objections raised in respect of the main request, in particular whether they could lead to a different formulation of

the problem and to a different assessment of the obviousness of the solution. Contrary to the respondent's view, it was not sufficient to identify additional distinguishing features, as it was left up to the Board and the appellants to develop an understanding as to why the amendments inserted into claim 1 could change the assessment of inventive step made with respect to the main request.

The respondent also relied on the primary object of the appeal proceedings, which in accordance with the established case law is to review the decision under appeal, and on the requirement that a party's case shall be directed among others to the requests on which the decision under appeal was based, which now is reflected in Article 12(2) RPBA 2020. The present auxiliary requests were the same as those filed before the opposition division. This, however, does not exonerate that party of clearly and concisely setting out at the onset of the appeal proceedings the reasons why the patent should be maintained in a form which was not examined by the opposition division, and to what extent the auxiliary request would overcome the objections formulated in the notices of appeal, if corresponding requests are maintained on appeal.

Accordingly, the lack of arguments in support of inventive step of the first to fourth auxiliary requests in the respondent's rejoinder results in a lack of proper substantiation within the meaning of Article 12(2) RPBA 2007. Under these circumstances, the first to fourth auxiliary requests can not be taken into account under Article 12(4) RPBA 2007 (Case Law, supra, V.A.4.12.5).

7.2 In response to the Board's communication the respondent provided with letter of 3 December 2020 additional observations with respect to the auxiliary requests. These observations constitute an amendment to the respondent's case within the meaning of Article 13(1) RPBA 2007, the provision of Article 13 RPBA 2007 still applying where the summons to oral proceedings has been notified before the entry into force of the RPBA 2020 (Article 25(3) RPBA 2020). When deciding on the admittance of the amendment, the Board's discretion shall be exercised in view of, *inter alia,* the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

Even taking into account these additional observations, the respondent did not submit that the features inserted into claims 1 of the auxiliary requests, i.e. the volume of the pastilles from 0.003 cm^3 to 0.15 cm^3 for the first auxiliary request, the amount of encapsulated perfume from 0.6 % to 4 % by weight based on the composition for the second auxiliary request, the minimum amount of PEG of 85 % by weight for the third auxiliary request or the mass of each pastille from 0.95 mg to 125 mg for the fourth auxiliary request, would result in a different starting point for assessing inventive step or a different formulation of the problem solved. The respondent submitted in essence with these additional observations that D19 taught away from using the features inserted in claims 1 of the second and third auxiliary requests and that a further selection from the teaching of D19 would be necessary to arrive at the product in accordance with the fourth auxiliary request. As to the first auxiliary request no submission was made in respect of inventive step. On that basis and having regard to the reasons given in

above points 6.1 to 6.5 concerning obviousness of the solution claimed for the main request in view of D19, the Board concludes that the additional submissions made by the respondent with letter of 3 December 2020 are on the face of it unsuitable to overcome the objection that the claimed product lacks an inventive step over substrate III of D19.

Consequently, the Board having regard to the absence of justification for submitting observations with respect to inventive step of the auxiliary requests at this stage of the appeal proceedings and the need for procedural economy made use of its discretionary power under Article 13(1) RPBA 2007 by not admitting into the proceedings the amendment to the respondent's case contained in the letter of 3 December 2020.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

B. ter Heijden D. Semino

Decision electronically authenticated