

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 21 May 2019**

Case Number: T 1085/17 - 3.3.10

Application Number: 06300921.1

Publication Number: 1894603

IPC: A61K8/81, A61K8/02, A61Q13/00,
D06M13/00, C11D3/50, A61K8/11,
A61Q5/02

Language of the proceedings: EN

Title of invention:

Encapsulation of bulky fragrance molecules

Patent Proprietor:

Takasago International Corporation

Opponents:

Henkel AG & Co. KGaA
Givaudan Schweiz AG

Headword:

Relevant legal provisions:

EPC Art. 56

Keyword:

Inventive step - (no) - all requests

Change of venue of oral proceedings - not allowed

Decisions cited:

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1085/17 - 3.3.10

D E C I S I O N
of Technical Board of Appeal 3.3.10
of 21 May 2019

Appellant: Takasago International Corporation
(Patent Proprietor) 37-1, Kamata 5-chome,
Ohta-ku
Tokyo-to 144-8721 (JP)

Representative: Nevant, Marc
Cabinet Beau de Loménie
158, rue de l'Université
75340 Paris Cedex 07 (FR)

Respondent: Henkel AG & Co. KGaA
(Opponent 1) Henkelstrasse 67
40589 Düsseldorf (DE)

Representative: Viering, Jentschura & Partner mbB
Patent- und Rechtsanwälte
Kennedydamm 55 / Roßstrasse
40476 Düsseldorf (DE)

Respondent: Givaudan Schweiz AG
(Opponent 2) Ueberlandstrasse 138
8600 Duebendorf (CH)

Representative: Haseltine Lake Kempner LLP
Redcliff Quay
120 Redcliff Street
Bristol BS1 6HU (GB)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 6 March 2017
revoking European patent No. 1894603 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman P. Gryczka
Members: R. Pérez Carlón
W. Van der Eijk

Summary of Facts and Submissions

- I. The appellant (patent proprietor) lodged an appeal against the decision of the opposition division to revoke European patent No. 1 894 603.
- II. Two notices of opposition had been filed on grounds which included lack of inventive step (Article 100(a) EPC).
- III. The documents filed during these proceedings include the following:

D3: US 2005/0112152 A1
- IV. The opposition division concluded that example 3 of D3 was the closest prior art. The patent in suit did not attribute any effect to the claimed fragrance due to the presence of at least five fragrances. The composition required by claim 1 resulted from an arbitrary selection from a list of fragrance ingredients already disclosed in D3 as suitable for the same purpose and was therefore not inventive.
- V. The subject-matter of claim 1 of all requests included the subject-matter of claim 1 of auxiliary request 6bis, which reads as follows:

"Encapsulated fragrance comprising a core shell capsule having a thickness of 0.025-1.0 μ m and a fragrance composition, wherein the capsule shell is an aminoplast capsule constituted of 50-100% by weight of formaldehyde-melamine or formaldehyde-melamine-urea or formaldehyde-urea condensation polymer, and wherein the fragrance composition comprises:

I) 60-100% by weight of at least 5 fragrance compounds, 100% by weight of said fragrance compounds comprising at least 3 bulky molecules having a molecular weight less than 325 atomic mass units, conforming to the following structures:

a) molecules containing more than one ring, each ring having between 3 and 8 atoms of any of carbon, oxygen, nitrogen or sulphur in any ring and no atoms being shared by any of the rings, selected from diphenyl oxide (101-84-8), benzyl salicylate (118-58-1), cyclohexyl salicylate (25485-88-5), phenyl ethyl phenylacetate (102-20-5), Lyrame (67634-12-2), Orriniff (125352-06-9), Santalex T (68877-29-2), Karanal (117933-89-8), vanillin propylene glycol acetal (68527-74-2), Indolene 50 (68908-82-7), Okoumal (131812-67-4), cyclohexyl anthranilate (7779-16-0), 2-cyclohexylidene-2-phenyl acetonitrile (10461-98-0), cyclohexyl cinnamate (7791-17-1), benzyl cinnamate (103-41-3), benzyl eugenol (120-11-6), cinnamyl anthranilate (87-29-6), cinnamyl cinnamate (122-69-0), cinnamyl phenyl acetate (7492-65-1), Doremox (24720-09-0), dibenzyl ketone (102-04-5), and benzophenone (119-61-9);

b) molecules having at least two rings, each ring having between 3 and 8 atoms of any of carbon, oxygen, nitrogen or sulphur in which any two rings share a common atom, selected from 1,5-dioxaspiro(5.5)undecane 2-methyl (6413-26-9), 2,2,3',7',7'-pentamethylspiro(1,3dioxan-5,2'-norcarane) (12151-67-0 and 12151-68-1), Vigoflor (68480-11-5), 3,3-dimethyl-1,5-dioxaspiro(5,5)undecane (707-29-9), Oxaspirane (68228-06-8), and 8-methyl-1-oxaspiro(4,5)decan-2-one (94201-19-1);

c) molecules having at least two rings, each ring having between 3 and 8 atoms of any of carbon, oxygen, nitrogen or sulphur in which any two rings share at

least two adjacent common atoms, selected from yara yara (93-04-9), coumarin (91-64-5), methyl naphthyl ketone, (941-98-0) isobutylquinoline (65442-31-1), Galaxolide (01222-05-5), Tonalide (021145-77-7), Cashmeran (033704-61-9), Cyclacet (5413-60-5), Cyclaprop (17511-60-3), Cyclabute (067634-20-2), Cedramber (019870-74-7), Dulcinyll (55418-52-5), Grisalva (68611-23-4), Ambrinol 20T (41199-19-3), beta caryophyllene, caryophyllene, caryophyllene acetate, alpha cedrene, 8-cedren-13-ol, cedrol, cedryl acetate, cedrenyl acetate, cedryl formate, cedryl methyl ether, Heliobouquet (1205-17-0), Fruitate (080657-64-3), 1,4-cineole (470-67-7), 1,8-cineole (470-82-6), borneol (464-45-9), bornyl acetate (76-49-3), isoborneol (124-76-5), isobornyl acetate (125-12-2), isobornyl formate (1200-67-5), isobornyl methyl ether (5331-32-8), isobornyl propionate (2756-56-1), Neoprofen (122795-41-9), Isoprofen (90530-04-4), Florosantol, Cedanol (7070-15-7), fenchyl alcohol (1632-73-1), ambrox (6790-58-5), iso E super (54464-57-2), Patchoulol (5986-55-0), norpatchoulol (41429-52-1), Isolongifolanone (23787-90-8), amboryl acetate (59056-62-1), Nootkatone (4674-50-4), Florex (69486-14-2), Cedryl methyl ether (19870-74-7 and 67874-81-1), alpha pinene (80-56-8), beta pinene (127-91-3), dihydroactinidolide (1536-74-8), alpha copaene (3856-25-5), camphene (79-92-5), camphor (464-49-3), Phantolide (15323-35-0), Celestolide (13171-00-1), Traseolide (68140-48-7), β naphthyl isobutyl ether (2173-57-1), decahydro- β -naphthyl acetate (10519-11-6), Scentenal (86803-90-9), Plicatone (41724-19-0), Rhubofix (41816-03-9), and CetaloX (3738-00-9)

d) molecules containing a single alicyclic ring which contains at least 5 atoms, but no more than 8 atoms, of any of carbon, nitrogen, oxygen and sulphur

in which at least one of the carbon atoms of the ring has two substituents i.e. it is a tertiary carbon atom, or a carbon atom alpha to the ring is a tertiary carbon atom, or the ring has substituents on at least three of the atoms which make up the ring, selected from para tertiarybutyl cyclohexanol (98-52-2), para tertiary butyl cyclohexyl acetate (32210-23-4), ortho tertiary butyl cyclohexanol (13491-79-7), ortho tertiary butyl cyclohexyl acetate (88-41-5), para tertiary butyl cyclohexanone, Hedione (24851-98-7), α ionone (127-41-3), β ionone (14901-07-6), γ ionone (79-76-5), α damascone (24720-09-0), β damascone (23726-923), δ damascone (57378-68-4), γ damascone (35087-49-1), β damascenone (23696-85-7), Bacdanol (28219-61-6), Clarycet (131766-73-9), Coniferan (67874-72-0), Dihydrofloralol (68480-15-9), Ebanol (67801-20-1), Fraistone (6290-17-1), Isocyclogeraniol (68527-77-5), Jasmelia (58285-49-3), fenchol (22627-95-8), fenchyl acetate (13851-11-1), Levosandol (28219-61-6), methyl dioxolan (6413-10-1), Nopol (128-50-7), Nopyl acetate (35836-72-7), 2,6,6-trimethyl-1-cyclohexen-1-acetaldehyde (472-66-2), 2,4,6-trimethyl-3-cyclohexene-1-carboxaldehyde (1335-66-6), 2,4,6-trimethyl-3-cyclohexene-1-methanol (68527-77-5), 3-methyl-5-propyl-2-cyclohexen-1-one (3720-16-9), Dynascone (56973-85-4), alpha iso methyl ionone (1335-46-9) Polysantol (107898-54-4), Romascone (81752-87-6), Timberol (70788-30-6), Amber Core (139504-68-0), Precyclemone B (52474-60-9), Boronal (3155-71-3), 2,2,5-trimethyl-5-pentylcyclopentanone (65443-14-3), Brahmanol (72089-08-8), Sandalmysore core (28219-60-5), Sandalore (65113-99-7), 4-tert-pentylcyclohexanone (16587-71-6), Kephalis (36306-87-3), Floramat (67801-64-3), Jasmapol (37172-53-5), 3-oxo-2-(2-cis

pentenyl) cyclopentane acetic acid methyl ester (1211-29-6), and 2-pentyl-3-methyl-2cyclopenten-1-one (1128-08-1);

e) molecules containing at least one macrocyclic ring; i.e. a ring with more greater than eight atoms of any of carbon, nitrogen, oxygen and sulphur in the ring, selected from Ethylene Brassylate (105-95-3), 3-methylcyclopentadecanone (541-91-3), 3-methylcyclopentadecenone (82356-51-2), 3-methylcyclopentadecanol (4727-17-7), Exaltolide (106-02-5), Exaltone (502-72-7), Exaltenone (14595-54-1), Cedroxyde (71735-79-0), 15-pentadecenolide (34902-57-3), (z)-9-cycloheptadecen-1-one (542-46-1), 12-methy-14-tetradec-9-enolide, ambrettolide (28645-51-4), Ambretone (37609-25-9), Violiff (87731-18-8), Trimofix O (28371-99-5), cyclodecyl methyl ether (2986-54-1), and ethoxymethoxycyclododecane (5867-11-6);

f) molecules containing at least one substituted aromatic ring containing at least 5 atoms of any of carbon, nitrogen, oxygen or sulphur, but in which at least one substituent has a tertiary carbon in a position alpha or beta to the ring, selected from lillial (80-54-6), Acetoketal (5406-58-6), 4-t-butylbenzenepropionaldehyde (18127-01-0), dimethylbenzylcarbiny acetate (151-05-3) and Damascol 4 (4927-36-0);

g) molecules containing a substituted aromatic ring comprising at least 5 atoms with at least 3 substituents groups on the ring all of which must contain at least 2 atoms from among carbon, nitrogen, oxygen or sulphur, selected from 1,3,5-Trimethoxybenzene (621-23-8), acetyl Eugenol (93-28-7), acetyl vanillin (881-68-5), anisyl acetate (104-212), methyl eugenol (93-15-5), Musk thibetene (145-39-1), Musk ambrette (83-66-9), 3,4-dimethoxybenzoic acid

(93-07-2), 3,4 methylenedioxybenzyl acetate (326-61-4) and veratraldehyde (120-14-9);

and

II) 0-40% by weight of pro-fragrances, solvents, and other benefit agents which possess any of the structural features a) to g) but are not constrained by the molecular weight restrictions, wherein solvents make up less than 20% by weight of the capsule core;

wherein 80-100% by weight of the fragrance ingredients have ClogP values between greater than 2.00 and 4.00."

VI. The arguments of the appellant where relevant to the present decision were as follows:

Claim 1 of auxiliary request 6bis related to an encapsulated fragrance containing five compounds selected from the list specified in claim 1 and no other fragrance compounds. Example 2 of document D3 was the closest prior art. It disclosed an encapsulated fragrance which differed from that of claim 1 by virtue of the relative amount of compounds according to the list in claim 1, and of ingredients having a ClogP value within the required limits. The problem addressed by the claimed invention being that of providing an improved encapsulated fragrance with reduced leakage. If example 3 of D3 were to be considered closer to the claimed invention than example 2, the problem would be the provision of an alternative encapsulated fragrance. The claimed solution, characterised by the number of encapsulated fragrance components, namely at least five instead of only one, was nevertheless inventive, as document D3 did not point towards the claimed composition.

VII. The arguments of the respondent where relevant for the present decision were as follows:

Example 3 of document D3 had the most features in common with the fragrance of claim 1 and was thus the closest prior art. The problem addressed by the claimed invention was simply the provision of an alternative encapsulated fragrance. The solution, characterised by the number of fragrance components and their nature was obvious with reference to D3. For that reason, none of the requests on file were inventive.

VIII. The board summoned the parties to oral proceedings, to be held in Haar on 21 May 2019.

IX. By letter dated 8 April 2019, the appellant requested that the oral proceedings be held in Munich, more precisely at the main EPO building at Bob-van-Benthem-Platz 1, instead of Haar.

X. The board rejected this request in a communication dated 25 April 2019.

XI. The appellant was represented at the oral proceedings, which took place at the time and place set by the board in its summons.

XII. The final requests of the parties were as follows:

- The appellant requested that the decision under appeal be set aside and that European patent No. 1 894 603 be maintained in amended form according to its main request or its auxiliary requests 1-3, all filed with the grounds for appeal, or according to auxiliary request 4, filed

with a letter of 11 February 2019, or according to auxiliary requests 5bis-7bis, filed with a letter of 17 May 2019.

It further requested that its request to hold the oral proceedings at the EPO building at Bob-van-Benthem-Platz 1 in Munich instead of in Haar on 8 April 2019 be referred to in this decision.

- The respondents requested that the appeal be dismissed.

XIII. At the end of the oral proceedings, the decision was announced.

Reasons for the Decision

1. The appeal is admissible.

Location of oral proceedings before the board

2. By letter dated 8 April 2019, the appellant requested that the oral proceedings, for which a summons had already been issued, be held in Munich, more precisely at the main EPO building at Bob-van-Benthem-Platz 1, instead of in Haar.

In support of this request the appellant mentioned that the referral from Board 3.5.03 in decision T0837/17 to the Enlarged Board of Appeal (case G2/19) cast doubt on the legality of holding oral proceedings in Haar, and that another board had agreed to hold oral proceedings in Munich.

3. The board rejected this request in a communication dated 25 April 2019, with the following reasoning.

The doubts expressed are not a sufficient reason to move the oral proceedings to Munich. Whether or not the legal doubts concerning Haar as a place to hold oral proceedings are justified will be considered by the Enlarged Board of Appeal.

Pending the proceedings in case G 2/19 and in the absence of any further substantiation of the request, the board maintained the summons to oral proceedings at the place where the Boards of Appeal are currently located, which is Haar.

Inventive step - auxiliary request 6bis

4. Interpretation of claim 1 of auxiliary request 6bis
- 4.1 The parties were divided as to how claim 1 of auxiliary request 6bis should be interpreted. The board will follow the appellant's interpretation of claim 1, namely that the composition required by claim 1 contains at least 60% of compounds selected from the list of claim 1 and no other fragrance compounds.
- 4.2 On examining the claimed invention, claim 1 of auxiliary request 6bis will be considered to relate to an encapsulated fragrance comprising a fragrance composition comprising (I) at least 60% by weight of at least 5 compounds selected from a list, (II) optionally up to 40% by weight of pro-fragrances, solvents and other beneficial agents, wherein the solvents make up less than 20% by weight of the capsule core, and at least 80% by weight of the fragrance ingredients have ClogP values between greater than 2 to 4.

4.3 Since the board, with this restrictive interpretation, has come to the conclusion that the claimed encapsulated fragrance is not inventive, it is not necessary to elaborate whether also a more extensive interpretation would be possible.

5. Closest prior art

5.1 The opposition division and the parties considered that document D3 was the closest prior art.

5.2 It was not disputed that the nature of the capsule shell could not distinguish the claimed fragrance from that of D3, regardless of which embodiment of D3 was considered as the closest prior art.

5.3 It was also not disputed that document D3 addresses the same technical problem as the patent in suit, namely the premature release of the fragrance from the capsule shells [0004].

5.4 The parties were however divided with respect to which embodiment of D3 came closer to the claimed invention: The appellant argued that example 2 of D3 came closer but the respondents considered, in agreement with the decision of the opposition division, that example 3 was the closest prior art.

Example 2 of D3 discloses an encapsulated fragrance containing fourteen components [0157] each of them of equal weight percent [0156], six of which are included in the list of claim 1 (43% by weight). Seven of these components (57% by weight) have ClogP values between 2 and 4. Thus, the fragrance composition of example 2 differs from that required by claim 1 of auxiliary request 6bis by virtue of the relative amount of

compounds according to the list of claim 1, and of ingredients having a ClogP value within the required limits.

Example 3 of D3 discloses capsules containing a fragrance which consists of Cyclacet, which is a compound according to the list in claim 1 (eighth component under type c). Cyclacet has a logP of 3.3 (D3) and a ClogP of 2.9 (patent in suit, Table 1) and thus within the limits set by claim 1. Example 3 of D3 differs from the fragrance of claim 1 of auxiliary request 6bis merely in the number of fragrance compounds in the encapsulated fragrance.

5.5 As Example 3 of D3 has more features in common with the claimed encapsulated fragrance than Example 2, the board concludes that the former is the closest prior art.

5.6 Technical problem underlying the invention

It was not disputed that, if Example 3 of D3 were to be considered the closest prior art, the technical problem underlying the claimed invention was to provide an alternative encapsulated fragrance.

5.7 Solution

The solution to this technical problem is the claimed encapsulated fragrance, characterised in that it contains at least five fragrance compounds selected from the list set in claim 1 of auxiliary request 6bis.

5.8 Success

It was not disputed that the encapsulated fragrance of

claim 1 of auxiliary request 6bis solves the problem formulated above.

- 5.9 It thus remains to be decided whether the proposed solution to the objective problem defined above would have been obvious for the skilled person in view of the prior art.

The claimed solution is characterised by the number (at least five) and the nature (selected from the list in claim 1) of the encapsulated fragrance components.

The skilled person, trying to obtain an alternative encapsulated fragrance would have considered combining various fragrance compounds, as fragrance formulations are frequently complex mixtures of many fragrance ingredients (D3, [0023]). D3 teaches the use of at least eight components.

D3 discloses a list of compounds suitable for encapsulated fragrances (Table 1), including members of the list in claim 1 of auxiliary request 6bis having ClogP values within the required boundaries (lilial, musk tibetine, phenylethylphenyl-acetate, iso E super, to mention but a few). The skilled person, trying to obtain an alternative encapsulated fragrance, would have chosen components from Table 1 of D3 and would thus have arrived at the claimed invention without using inventive skills.

- 5.10 For these reasons the board concludes that the subject-matter of claim 1 of auxiliary request 6bis is not inventive within the meaning of Article 56 EPC.
- 5.11 The respondent argued that document D3 disclosed compounds having a ClogP higher than 4 as preferred

components and thus taught away from the claimed invention.

However, document D3 also discloses components with a ClogP lower than 4 (Table 1, [0157]). Be that as it may, the starting point for examining the invention is considered to be example 3 of D3, which meets the requirement set in claim 1 with respect to the ClogP of the fragrance ingredients.

This argument is therefore not convincing.

- 5.12 The respondent argued that there was no reason why the skilled person would have chosen, from the components in Table 1 of D3, those according to the list in claim 1 having, at the same time, a ClogP within the required limits.

However, the skilled person, seeking a simple alternative, would have considered any combination of the components listed in Table 1 of D3. Although only some of these combinations are defined according to claim 1 of auxiliary request 6bis, the subject-matter of claim 1 does not go beyond an arbitrary selection of other possible alternatives.

This argument of the appellant is thus not convincing.

Inventive step - all other requests

6. It was not disputed that a negative conclusion on the issue of inventive step with respect to auxiliary request 6bis would apply in the same manner to all the appellant's requests.

As none of the appellant's requests relates to

inventive subject-matter within the meaning of Article 56 EPC, none of them are allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



C. Rodríguez Rodríguez

P. Gryczka

Decision electronically authenticated