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Datasheet for the decision of 18 May 2021

Case Number: T 2455/18 - 3.3.07

Application Number: 07718791.2

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Language of the proceedings: EN

Title of invention:
CONTROLLED RELEASE FORMULATIONS COMPRISING UNCOATED DISCRETE UNIT(S) AND AN EXTENDED RELEASE MATRIX

Patent Proprietor:
Alphapharm Pty Ltd.

Opponents:
Agrobiogen GmbH Biotechnologie
Hamm&Wittkopp Patentanwälte PartmbB
Hoffmann Eitle

Headword:
Controlled release formulations/ALPHAPHARM

Relevant legal provisions:
EPC Art. 54, 56, 123(2)
EPC R. 103(1)(a), 111(2)
RPBA Art. 12(4)

Keyword:

Main request(a) and Auxiliary requests 1(a)-4(a) - Novelty and amendments (No)
Auxiliary requests 5 and 5a - Novelty (No)
Auxiliary requests 6(a)-10(a) - Amendments (No)
Auxiliary requests 11(a)-17(a) - Inventive step (No)

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Case Number: T 2455/18 - 3.3.07

D E C I S I O N
of Technical Board of Appeal 3.3.07
of 18 May 2021

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Appellant: (Opponent 2)	Hamm&Wittkopp Patentanwälte PartmbB Jungfernstieg 38 20354 Hamburg (DE)
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Appellant: (Opponent 3)	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastrasse 30 81925 München (DE)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)

Decision under appeal: **Interlocutory decision of the Opposition Division of the European Patent Office posted on 8 August 2018 concerning maintenance of the European Patent No. 2010158 in amended form.**

Composition of the Board:

Chairman A. Usuelli
Members: D. Boulois
P. Schmitz

Summary of Facts and Submissions

I. European patent No. 2 010 158 was granted on the basis of a set of 15 claims.

Independent claim 1 as granted read as follows:

"1. A controlled-release formulation comprising 1 to 20 distinct and discrete units located in physical juxtaposition within a capsule to enable administration to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;
(ii) an extended-release agent comprising a matrix of one or more polymers; and, optionally,
(iii) one or more pharmaceutically acceptable excipients, each unit being in the form of an uncoated pellet or mini-tablet,
wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient."

II. The patent had been opposed under Article 100 (a), (b), (c) EPC on the grounds that its subject-matter lacked novelty and inventive step, was not sufficiently disclosed, and extended beyond the content of the application as filed.

III. The appeal lies from the decision of the opposition division finding that the patent in amended form according to auxiliary request 14 met the requirements of the EPC. The decision was based on the claims as granted as main request, on the sets of claims filed

with letter of 12 July 2017 as auxiliary requests 1-3 and 5-12, with letter of 13 June 2018 as auxiliary requests 4 and 13, and during the oral proceedings of 21 June 2018 as auxiliary request 14.

IV. The documents cited during the opposition proceedings were *inter alia* the following:
D3: WO 00/38686
D4: WO 2005/099674
D19: US 6,340,475 B2
D24: WO 2005/048979
D26: Rote Liste 2006, Reminyl®
D27: EP 1 140 105 B1
D31: Pharmazeutische Technology, 4th ed., Bauer el al., 1993
D32: Multiparticulate Oral Drug Delivery, Swarbrick, 1994
D33: Der pharmazeutische Betrieb, 2nd ed , Ritschel, 2002
D35: Trazodone Hydrochloride Controlled Release Matrix and Matrix-Mini Tablets, Thesis, K.Penumatcha, 2003
D41: C. De Brabander et al., Int. J. Pharm. 2000, 199, 195-203

V. According to the decision under appeal, the main request did not meet the requirements of Article 123(2) EPC in view of dependent claims 10, 14 and 15, while a basis could be found for claim 1 in view of the term "comprising". This applied also to auxiliary requests 1, 3, 4, 5, 7, 8, 10, and 11, for the same reasons as for the main request.

Example 1 of D19 was novelty destroying for claim 1 of auxiliary requests 2 and 6 which was identical to claim 1 of the main request. The same applied to claim 1 of

auxiliary requests 9, 12 and 13, which were restricted to specific active ingredients.

Claim 1 of auxiliary request 14 was restricted to "zopiclone, zolpidem, galantamine, rosiglitazone and eszopiclone" as active ingredients. Auxiliary request 14 met the requirements of Articles 123(2), 83 and 54 EPC. As regards inventive step, D27 was considered to represent the closest prior. The differences between claim 1 of auxiliary request 14 and example 4 of D27 were the presence of units of uncoated pellets or mini-tablets and of an extended release agent comprising a matrix of one or more polymers. The problem was the provision of an improved controlled release formulation of zopiclone, zolpidem, galantamine, rosiglitazone or eszopiclone, mimicking the biphasic release of D27 while providing a simplified manufacturing process. The solution was not obvious in view of the cited documents D31 or D41.

VI. The patent-proprietor, opponents 01, 02 and 03 (hereinafter respectively appellant-proprietor, appellant-opponent 01, appellant-opponent 02 and appellant-opponent 03) filed an appeal against said decision.

VII. With its statement setting out the grounds of appeal dated 18 December 2018, the appellant-proprietor filed a main request a, auxiliary requests 1-11 and 1a-11a.

Main request a and auxiliary requests 1-11 and 1a-11a

Claim 1 of the main request a and auxiliary requests 1, 1a, 2 and 2a is identical to claim 1 of the main request, i.e. the patent as granted, these requests differing through their dependent claims.

Auxiliary request 3-5 and 3a-5a

The subject-matter of claim 1 of auxiliary request 3 read as follows, the difference with respect to the main request being indicated in **bold:**

"1. A controlled-release formulation comprising 1 to 20 distinct and discrete units located in physical juxtaposition within a capsule to enable administration to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;
(ii) an extended-release agent **which is** a matrix of one or more polymers; and, optionally,
(iii) one or more pharmaceutically acceptable excipients, each unit being in the form of an uncoated pellet or mini-tablet,
wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient."

Auxiliary requests 3a, 4, 4a, 5 and 5a have a claim 1 identical to auxiliary request 3, and differ only through their dependent claims.

Auxiliary requests 6-8, 6a-8a

The subject-matter of claim 1 of auxiliary request 6 read as follows, the difference with respect to the main request being indicated in **bold:**

"1. A controlled-release formulation comprising 1 to 20 distinct and discrete units located in physical juxtaposition within a capsule to enable administration

to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;
(ii) an extended-release agent comprising a matrix of one or more polymers; and, optionally,
(iii) one or more pharmaceutically acceptable excipients,
each unit being in the form of an uncoated pellet or mini-tablet,
wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient,
and wherein the active pharmaceutical ingredient is selected from zopiclone, zolpidem, galantamine, rosiglitazone and eszopiclone, or pharmaceutically acceptable salts thereof".

Claim 1 of auxiliary requests 6a, 7, 7a, 8 and 8a is identical to claim 1 of auxiliary request 6, and these requests differ only through their dependent claims.

Auxiliary request 9-11, 9a-11a

The subject-matter of claim 1 of auxiliary request 9 read as follows, the difference with respect to the main request being indicated in **bold**:

"1. A controlled-release formulation comprising 1 to 20 distinct and discrete units located in physical juxtaposition within a capsule to enable administration to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;

(ii) an extended-release agent **which is** a matrix of one or more polymers; and, optionally,
(iii) one or more pharmaceutically acceptable excipients,
each unit being in the form of an uncoated pellet or mini-tablet,
wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient,
and wherein the active pharmaceutical ingredient is selected from zopiclone, zolpidem, galantamine, rosiglitazone and eszopiclone, or pharmaceutically acceptable salts thereof".

Claim 1 of auxiliary requests 9a, 10-11 and 10a-11a is identical to claim 1 of auxiliary request 9, and these requests differ only through their dependent claims.

VIII. With a letter dated 10 May 2019, the appellant-proprietor filed auxiliary requests 12-17 and 12a-17a.

Auxiliary request 12-14, 12a-14a

The subject-matter of claim 1 of auxiliary request 12 read as follows, the difference with respect to the main request being indicated in **bold**:

"1. A controlled-release formulation comprising 1 to 20 distinct and discrete units located in physical juxtaposition within a capsule to enable administration to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;
(ii) an extended-release agent comprising a matrix of one or more polymers; and, optionally,

(iii) one or more pharmaceutically acceptable excipients, each unit being in the form of an uncoated pellet or mini-tablet,
wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient, **and wherein the active pharmaceutical ingredient is galantamine or a pharmaceutically acceptable salt thereof**"."

Claim 1 of auxiliary requests 12a, 13-14 and 13a-14a is identical to claim 1 of auxiliary request 12, and these requests differ only through their dependent claims.

Auxiliary request 15-17, 15a-17a

The subject-matter of claim 1 of auxiliary request 15 read as follows, the difference with respect to the main request being indicated in **bold:**

"1. A controlled-release formulation comprising 1 to 20 distinct and discrete units located in physical juxtaposition within a capsule to enable administration to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;
(ii) an extended-release agent **which is** a matrix of one or more polymers; and, optionally,
(iii) one or more pharmaceutically acceptable excipients, each unit being in the form of an uncoated pellet or mini-tablet,
wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient, **and wherein the active pharmaceutical ingredient is galantamine or a pharmaceutically acceptable salt thereof**"."

Claim 1 of auxiliary requests 15a, 16-17 and 16a-17a is identical to claim 1 of auxiliary request 15, and these requests differ only through their dependent claims.

IX. In a communication dated 17 November 2020, the Board expressed its preliminary opinion that *inter alia* the main request did not meet the requirements of 123(2) EPC and lacked novelty. It further commented on the inventive step of auxiliary request 11 starting from document D27 as the closest prior art.

X. Oral proceedings took place on 18 May 2021 by videoconference in the absence of the appellant-proprietor.

XI. The arguments of the appellant-proprietor may be summarised as follows:

Main request - Amendments

A basis for limiting the extended-release agent to a matrix of one or more polymers could be found in claim 12, page 10, lines 29-31 and page 12, line 12 of the application as filed. The word "comprising" in claim 1 clearly indicated that the extended-release functionality was achieved by using a matrix and no change in technical content had been made to the claim. Claims 25 and 26 of the application as filed referred also to alternative extended-release agents as claimed in claim 12 of the application as filed, showing that other components were contemplated in the extended-release agent.

Dependent claim 10 was based on claim 26 of the application as filed. Restriction to the formulation of

claim 10 comprising “a plurality of units” was based on “one or more” (emphasis added) in claim 26.

A basis for dependent claim 14 could be found at page 11, lines 9-11 of the application as filed. This passage stated that the amounts were found “In particularly preferred embodiments...”. This indicated that the preference applied across multiple embodiments and there was no need to limit the preference to inclusion with the diameter.

Claim 15 referred to a preferred embodiment based around Example 2 and page 11, lines 19-22 of the application as filed. This passage singled out embodiments comprising 1, 2 or 3 units as preferred embodiments. The skilled person would have understood that a preferred embodiment based on the components of this example needed not be restricted to the precise amounts of each excipient. Nor was it be necessary to limit the size of the units to 5 mm. The general applicability of the claimed features would have been understood.

Auxiliary requests 1-11 - Amendments

Claim 10 had been deleted in auxiliary request 1 to address the added subject-matter attack.

Auxiliary request 2 was the same as auxiliary request 1, but claims 14 and 15 had additionally been deleted to address the added subject-matter attacks.

Auxiliary requests 3-5 mirrored the earlier requests, but claim 1 had been amended to remove reference to the "comprising" language in the definition of the extended-release agent.

Auxiliary request 6-11 mirrored the main request and auxiliary requests 1-5, except that claim 1 of these requests had been amended to a specific list of active ingredients.

Auxiliary request 1a-11a - Amendments

These requests were the same as the base requests but with dependent claims 5-8 deleted and subsequent claims renumbered.

Auxiliary requests 12-17, 12a-17a - Amendments

These requests mirrored the previous sets of requests, except that claim 1 of these requests had been limited to the subject-matter of claim 13 of the patent. Basis for this amendment may be found in claim 19 of the application as filed, referring to galantamine or pharmaceutically acceptable salts thereof.

Novelty

D19 was not novelty destroying. The burden was on the opponents to demonstrate that gastric release provided a controlled release of the active ingredient. There were different formulation approaches as in the claimed formulation. It was also not stated whether the pellets contained a unit dose of the drug used in the examples of D19.

Inventive step

The conventional approach in the art was to charge the capsules by mass of granulated particles , i.e. sugar coated spheres, such as in D27. The distinguishing

features were therefore that the individual granules were not distinct and discrete units each representing a unit dose of the active ingredient, that there were not 1-20 units per capsule, and that they were not uncoated or matrix-based.

The technical problem was the provision of an improved dosage form, where the improvement lies in the simplified manufacture and ease of providing multiple doses with an appropriate pharmacokinetic profile.

The present approach allowed the skilled person to mimic the release profile of existing formulation approaches, without the need for multiple step manufacturing processes, specialised equipment and still further did not require coating to achieve the advantageous release profile. It also allowed the skilled person to provide a good uniformity in dosing to be maintained across multiple dosage strengths without reformulation. The solution was not obvious in view of the cited documents.

XII. The arguments of the appellant-opponents may be summarised as follows:

Admission of auxiliary requests 6, 7, 9-11 and main request a, auxiliary requests 1a, 2a, 4a-10a into the proceedings.

According to appellant-opponent 01, all these requests were filed for the first time in the appeal proceedings, while they could have been filed earlier during the opposition proceedings.

Main request - Amendments

The subject-matter of claims 1 of the main request, did not fulfill the requirements of Article 123(2) EPC in view of the term "comprising" in the feature "an extended-release agent comprising a matrix of one or more polymers".

Novelty

Documents D19 and D24 were considered as relevant for novelty.

Inventive step

Example 4 of D27 described the preparation of a capsule containing controlled-release pellets and immediate-release mini-tablets. The differences between the present formulations and the controlled-release formulation disclosed in D27 was the absence of an immediate-release portion, and the presence of the drug dispersed within an extended-release matrix of one or more polymers. The technical effect derivable from the distinguishing features was the fact that a multiple step manufacturing process was not required. The objective technical problem could thus be seen in the provision of an alternative controlled-release formulation, which could be prepared without using a multiple step manufacturing process.
The claimed solution was obvious to the skilled person in view of the common general knowledge (D24, D31, D32, D33, D25, D35, D41).

Substantial procedural violation

According to appellant-opponent 2 the opposition division failed to provide an adequate reasoning in the decision under appeal with respect to the requirements

of Articles 123(2) and 56 EPC. This justified the reimbursement of the appeal fee.

XIII. Requests

The appellant-patent proprietor requested that the decision under appeal be set aside and the oppositions be rejected, alternatively that the decision be set aside and the patent be maintained on the basis of the main request a, auxiliary requests 1-11 or 1a-11a filed with letter of 18 December 2018, or auxiliary requests 12-17 or 12a-17a filed with letter of 10 May 2019.

The appellant-opponents 01, 02 and 03 requested that the decision under appeal be set aside and the patent be revoked.

The appellant-opponent 01 requested also that auxiliary requests 6, 7, 9-11 and main request a, auxiliary requests 1a, 2a, 4a, 5a, 6a, 7a, 8a, 9a and 10a not be admitted into the proceedings.

The appellant-opponent 02 requested additionally that the appeal fee be reimbursed, in view of a substantial procedural violation of the opposition division.

Reasons for the Decision

1. Reimbursement of the appeal fees

1.1 According to appellant-opponent 02, the decision under appeal was insufficiently reasoned in the sense of Rule 111(2) EPC and was based on grounds on which the appellant-opponent 02 had no opportunity to present its

comments. This failure amounted to a substantial procedural violation.

The points raised by appellant-opponent 02 are the following:

(a) The opposition division did not provide an adequate reasoning of its interpretation of claim 1 of all requests under point 33.2 of the decision. In the absence of any support of its claim interpretation, the opposition division's assessment under Article 123(2) EPC must be regarded as arbitrary.

(b) There was an inconsistency in the decision of the opposition division between the decision taken under Article 123(2) EPC with regard to the interpretation of the feature "comprising" in claim 1 as granted, and the requirement to reconsider example 4 of the contested patent as a reference example. This constituted a surprise to appellant-opponent 02 which had an incidence on its argumentation, in particular regarding inventive step, during the oral proceedings before the opposition division.

(c) It was furthermore unclear from the decision why the opposition division changed the formulation of the problem from "the provision of an improved controlled release formulation for...galantamine..., with a simplified manufacturing process" to "the provision of an improved controlled release formulation of...galantamine..., mimicking the biphasic release of D27 while providing a simplified manufacturing process". The opposition division was under the obligation to explain to the opponent why the

formulation of the objective technical problem was changed during the oral proceedings. The decision under appeal was based on a ground on which the opponent had no opportunity to present its comments.

1.2 The Board cannot follow the appellant-opponent 02 on any of the raised points.

1.2.1 With regard to point (a), the decision of the opposition division states in point 33.2 that "the opposition division is of the opinion that the term "*an uncoated pellet or mini-tablet" allows only one interpretation. By using just one indefinite article, the adjective "uncoated" clearly relates to both subjects, to "pellet" and to "mini-tablet*"".

Hence, the opposition division gives a clear interpretation of the term "*an uncoated pellet or mini-tablet*" in paragraph 33.2, i.e that the adjective "uncoated" applies to both "*pellet*" and "*mini-tablet*" present in claim 1 of all requests as specified under point 33.1, hence applying to all requests.

The opposition division also gives a concrete reason under point 33.2 why they interpretated the term in this way and specified explicitly that it could not follow the argument of opponent 02 that the adjective "*uncoated*" applied only to the "*pellet*", which proves explicitly that the arguments of opponent 02 on this point were considered.

Moreover, the opposition division gives a complete reasoning as to Article 123(2) EPC in paragraph 36, which explains and clarifies its decision with regard to the subject-matter of claims 1, 10, 14 and 15. In

this paragraph, the opposition division also provides its interpretation of the feature "an extended-release agent comprising a matrix".

Consequently, the objection of the appellant-opponent 02 on this point is not founded and the opposition division's assessment under Article 123(2) EPC cannot be regarded as arbitrary.

1.2.2 With regard to point (b), the opposition division states in point 36.1 of its decision that it agrees with the position of the patent proprietor that the wording "*an extended-release agent* ***comprising*** *a matrix*" is the same as the wording "*an extended-release agent* ***is*** *a matrix*" and that the change from "***is***" to "***comprising***" does not add subject-matter to the original disclosure. This point is extensively discussed in point 36.1 of the decision .

The decision of the opposition division cannot constitute a surprise for any party, since the opposition division concurred with the opinion and arguments provided by the patent-proprietor. Whether or not the decision on this point is convincing or justified is a different issue.

The considerations concerning example 4 of the patent, were submitted by appellant-opponent 2 for the first time during the oral proceedings. In the Board's view, the reformulation of example 4 of the patent, which relates to coated mini-tablets, is in line with the explanations and interpretation of the opposition division and does not present any inconsistency with the interpretation made by the opposition division in its decision with regard to the term *"an extended-release agent comprising a matrix*". It is noted in

particular that example 4 was recalled as "comparative example", although this was contested by the patent-proprietor, and was not objected by any opponent (see the minutes of the oral proceedings before the opposition division).

Consequently, the objection of the appellant-opponent 02 on this point is also not founded.

1.2.3 As regards point (c) the problem as defined by the opposition division in its decision on auxiliary request 14 is "*the provision of an improved controlled-release formulation of zopiclone, galantamine, rosiglitazone or eszopiclone mimicking the biphasic release of D27, while providing a simplified manufacturing process*".

The problem as defined by the patent-proprietor in its reply to the notices of opposition on claim 1 as granted was "*the provision of an improved dosage form, where the improvement is simplified manufacture and ease of providing multiple doses*" (see letter of 12 July 2017, point 7.3). Furthermore, in its letter of 13 June 2018 the patent-proprietor explains that the approach followed by the inventors allows the skilled person to "mimic the release profile of existing formulation approaches" (point 36). Indeed in point 31.6 of its decision the opposition division states the the patent proprietor formulated the technical problem as the provision of an improved dosage form mimicking the biphasic release of the dosage form of D27 while providing a simplified manufacturing process.
Hence, in formulating the technical problem the opposition division essentially endorsed the arguments of the patent proprietor which were known to the opponents.

The Board notes furthermore that appellant opponent-02 considered D27, corresponding to the commercial product Reminyl® as closest prior art, in particular example 5 of D27 which discloses capsules comprising a mixture of controlled release pellets and immediate release pellets of galantamine, i.e. providing a biphasic release of galantamine. The appellant-opponent 02 defined in its notice of opposition the problem over D27 as "*providing an alternative controlled release formulation for galantamine that is suitable for Reminyl® titration regimen*".

Hence, the problem as defined by the opposition division in its decision is based on the problem as it was posed by the patent-proprietor, with the specification of the active ingredients claimed in auxiliary request 14, and this formulation cannot constitute a surprise to any party.

Moreover, apart from the recognition of the existence of an improved controlled release formulation, the problem as defined by the opposition division is also essentially based on the problem as it was also defined by opponent 02 in the written opposition proceedings, in view of the disclosure of D27 or the product Reminyl®.

The formulation of the objective technical problem was therefore not changed by the opposition division during the oral proceedings and cannot constitute a surprise to appellant-opponent 02. Moreover, the decision under appeal is based on a ground on which the opponent had an opportunity to present its comments, as highlighted by the minutes of the oral proceedings before the opposition division.

Consequently, this point is also not founded.

1.3 Consequently, the objections raised by appellant-opponent 02 appear to represent a criticism of the decision of the opposition division. They neither substantiate a violation of the right to be heard nor a fundamental deficiency in the decision of the opposition division, which is sufficiently reasoned within the meaning of Rule 111(2) EPC.

Consequently, there is no substantial procedural violation which would justify a reimbursement of the appeal fee under Rule 103(1)(a) EPC.

2. Admission of auxiliary requests 6, 7, 9-11 and main request a, auxiliary requests 1a, 2a, 4a, 5a, 6a, 7a, 8a, 9a and 10a, 12-17 and 12a-17a into the proceedings.

2.1 According to appellant-opponent 01, auxiliary requests 6, 7, 9-11 and main request a, auxiliary requests 1a, 2a, 4a-10a should not be admitted into the appeal proceedings since they could have been filed earlier during the opposition proceedings.

2.1.1 These requests were filed at the earliest stage of the appeal proceedings, i.e. with the statement of grounds of appeal of the appellant-proprietor. In said sets of claims, auxiliary request 8 corresponds to auxiliary request 14 maintained by the opposition division.

2.1.2 Article 12(4) RPBA 2007 gives the Board a discretion not to admit requests which could have been presented before the first instance. The purpose of this provision is to avoid that fresh cases be made on appeal and to underline the review character of the

appeal procedure. However, also in this context procedural economy and efficiency is a criterion which needs to be considered. In the present case many requests were filed with the statement of grounds of appeal. As pointed out in the Board's communication, some of them can be seen as a reasonable reply to the first instance decision and therefore were to be admitted, while with some others this seemed questionable. In such a case it is sometimes easier to admit all of them, instead of giving reasons for each individual request why it was or was not to be admitted. This applies specifically when the Board can easily deal with these requests and the substantive examination poses no additional problems. In such a situation procedural economy prevails. Hence these requests are admitted.

2.1.3 The same conclusions apply to auxiliary requests 12-17 and 12a-17a,which had been filed with the reply to the appellant-opponents grounds of appeal.

3. Main request

3.1 Amendments

3.1.1 Claim 1

Claim 1 of the patent application as originally filed reads:
"1. A controlled-release formulation comprising one or more distinct and discrete units located in physical juxtaposition to enable administration to a patient in need of treatment in a single dose, characterised in that the or each unit comprise (s) :
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;

(ii) one or more extended-release agent(s); and, optionally,
(iii) one or more pharmaceutically acceptable excipients, wherein the sum of the unit dose(s) constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient."

Claim 1 as granted reads as follows with the main amendments shown in bold:
"1. A controlled-release formulation comprising **1 to 20** distinct and discrete units located in physical juxtaposition **within a capsule** to enable administration to a patient in need of treatment in a single dose, wherein each unit comprises:
(i) a unit dose of an active pharmaceutical ingredient or pharmaceutically acceptable salt thereof;
(ii) an extended-release agent **comprising a matrix of one or more polymers**; and, optionally,
(iii) one or more pharmaceutically acceptable excipients,
each unit being in the form of an uncoated pellet or mini-tablet, wherein the sum of the unit doses constitutes a pharmaceutically effective amount of the active pharmaceutical ingredient."

The features "***1 to 20***" and "***within a capsule***" find a direct disclosure on page 11, line 20 and page 14, lines 14-15 and original claims 7 and 10 of the application as filed. The feature "***each unit being in the form of an uncoated pellet or mini-tablet***" finds a direct basis on page 11, lines 1-2 of the application as filed.

The feature "***comprising a matrix of one or more polymers***" originates from original dependent claim 12 which reads "*A formulation as claimed in any one of*

claims 1 to 11 wherein the extended release agent is a matrix comprising one or more polymers". The reformulation of the wording of claim 12 from "is" to "comprising" has been questioned by appellant-opponents 01 and 02.

In the Board's view, both terms do not have the same meaning, since the term "*comprising*" does not exclude the presence of a further additional component as part of the extended release agent, which is not disclosed in the original application, while the originally used term "*is*" limits the extended release agent solely to a matrix. Consequently, the term "*comprising a matrix of one or more polymers*" does not find a basis in the application as filed. The subject-matter of claim 1 does not meet the requirements of Article 123(2) EPC for this reason.

3.1.2 Dependent claim 10

Dependent claim 10 reads:
"10. A formulation as claimed in any one of claims 1 to 9 which is a tablet formulation comprising a matrix of one or more pharmaceutically acceptable excipients and a plurality of units comprising a predetermined amount of an active pharmaceutical ingredient and one or more extended release agents, the plurality of units dispersed within said matrix."

Having regard to the reference to claim 1, claim 10 appears to relate to a tablet comprising a capsule.

The subject-matter of this claim originates from original claim 26, which relates to a tablet formulation and not to a capsule formulation as claimed in claim 1 of the main request. A tablet form was

presented in the original application as an alternative formulation to a capsule form, and not as a tablet comprising a capsule, for which there is no basis (see original application, page 14, lines 17-21).

The Board also agrees with the conclusion of the opposition division, in that original claim 26 was an independent claim which does not comprise the technical features of claims 1-9 as granted, and that it cannot serve as valid basis for dependent claim 10 being dependent from claims 1-9 as granted.

The subject-matter of claim 10 of the main request does not meet the requirements of Article 123(2) EPC.

3.1.3 Dependent claim 14

Dependent claim 14 reads:
"14. The formulation as claimed in claim 13 wherein the unit dose of galantamine is 8 mg."

A basis for "the unit dose of galantamine is 8 mg" can be found on page 11, lines 4-17 of the original description which mentions also the size of the corresponding units having this specific dose. The Board agrees with the opposition division that the claimed dose is linked with the pellet diameter given in the same passage and the feature "the unit dose of galantamine is 8 mg" cannot be taken in isolation from said passage.

Consequently, the subject-matter of claim 14 does not meet the requirements of Article 123(2) EPC.

3.1.4 Dependent claim 15

Dependent claim 15 reads:
"15. The formulation of claim 14 consisting of 1, 2 or 3 units, wherein each unit comprises:
(i) a unit dose of 8 mg of galantamine;
(ii) a polymer matrix which is a mixture of polyvinylpyrrolidone and polyvinylacetate;
(iii) hydrogenated vegetable oil;
(iv) povidone; and
(v) magnesium stearate."

The subject-matter of claim 15 is based on example 2 and represents an unallowable generalisation of said example, as it was also decided by the opposition division. Said example comprises numerous features which were omitted in dependent claim 15, such as *inter alia* the amounts of excipients or the size of the mini-tablets.

Consequently, the subject-matter of claim 14 does not meet the requirements of Article 123(2) EPC.

3.1.5 Accordingly, the main request does not meet the requirements of Article 123(2) EPC in view of the deficiencies illustrated above in claims 1, 10, 14 and 15.

3.2 Novelty over D19

Example 1 of document D19 discloses a capsule with two uncoated pellets made from metformin HCl in a polymeric matrix of Polyox which provides a controlled release of metformin. Consequently, the subject-matter of at least claim 1 of the main request lacks novelty over D19, and

the main request does not meet the requirements of Article 54 EPC.

4. Main request a, auxiliary requests 1, 1a 2, 2a

Claim 1 of the main request a and of auxiliary requests 1, 1a 2, 2a is identical to claim 1 of the main request and therefore lacks novelty over D19, and does not find a basis in the original application.

Moreover dependent claims 10 and 11 of the main request a, and dependent claims 13, 14 of auxiliary requests 1 and 1a correspond to dependent claims 14 and 15 of the main request and do neither find a basis in the application as filed.

Consequently, the main request a, auxiliary requests 1-2 and 1a-2a do not meet the requirements of Article 54 EPC and Article 123(2) EPC.

5. Auxiliary requests 3-5 and 3a-5a

Claim 1 of these requests has been amended by the feature:
"(ii) an extended-release agent **which is** a matrix of one or more polymers;".

This amendment has no incidence on the assessment of lack of novelty over D19, since the extended release agent in example 1 of D19 is limited to a matrix polymer. Consequently, none of these requests meet the requirements of Article 54 EPC.

Moreover, claims 10, 14 and 15 of auxiliary request 3 correspond to claims 10, 14 and 15 of the main request and claims 10 and 11 of auxiliary request 3a, claims

13, 14 of auxiliary request 4 and claims 9, 10 of auxiliary request 4a correspond to claims 14 and 15 of the main request, and therefore have no basis in the application as filed. Consequently, these requests do also not meet the requirements of Article 123(2) EPC.

6. Auxiliary requests 6-8 and 6a-8a

These requests still comprise in claim 1 the feature "(ii) an extended-release agent **comprising** a matrix of one or more polymers;" which is also present in the main request.

Auxiliary requests 6, 6a, 7, 7a also comprise dependent claims corresponding to dependent claims 14 and 15 of the main request, namely claims 13 and 14 of auxiliary request 6, claims 9 and 10 of auxiliary requests 6a, claims 12 and 13 of auxiliary requests 7, claims 8 and 9 of auxiliary requests 7a.

Consequently, auxiliary requests 6-8 and 6a-8a do not meet the requirements of Article 123(2) EPC for the same reasons as the main request.

7. Auxiliary requests 9-10 and 9a-10a

Dependent claims 9, 13, 14 of auxiliary request 9 correspond to claims 10, 14 and 15 of the main request; dependent claims 9 and 10 of auxiliary request 9a, dependent claims 12 and 13 of auxiliary request 10, and dependent claims 8 and 9 of auxiliary request 10a correspond to dependent claims 14 and 15 of the main request.

These claims have no basis in the application as filed for the same reasons as the main request.

Consequently, these requests do not meet the requirements of Article 123(2) EPC.

8. Auxiliary request 11 and 11a - Inventive step

8.1 Claim 1 of auxiliary request 11 and 11a are identical and have been amended by the introduction of the feature "(ii) an extended-release agent **which is** a matrix of one or more polymers" and by the restriction to some specific active ingredients, namely **"wherein the active pharmaceutical ingredient is selected from zopiclone, zolpidem, galantamine, rosiglitazone and eszopiclone, or pharmaceutically acceptable salts thereof"**.

8.2 The invention relates to modified release pharmaceutical compositions.

8.3 The opposition division considered D27 (corresponding also to D3) to be the closest prior art since *inter alia* this document was the only document which related specifically to galantamine, which is one of the claimed active ingredient. D27 is also the choice of the appellant-proprietor and the Board agrees that this is a reasonable starting point.

D27 discloses capsules comprising sugar spheres coated with an active agent such as galantamine and over-coated with an extended release polymer. Example 4 discloses furthermore the presence of immediate release mini-tablets in the capsule, namely 75% of controlled release pellets and 25% immediate release tablet in the capsule. Said formulation is prepared through a multi-step manufacturing process. This document does not disclose an extended release agent which is a matrix of

one or more polymers and shows on the contrary coated particles.

8.4 According to the appellant-proprietor, the problem can be seen as the provision of an improved dosage form, where the improvement is a simplified manufacture and ease of providing multiple doses with an appropriate pharmacokinetic profile.

8.5 The problem as defined by the appellant-proprietor is solved in a credible manner. Table 1 of the contested patent shows that formulations according to the claimed invention, here the capsules filled with mini-tablets as disclosed in examples 1-3, provide an extended release of galantamine. Moreover, the process of preparing the formulations of examples 1-3 is a simple mixing and compression step of the active ingredient and excipients in mini-tablets and their filling in capsules.

8.6 The solution to the problem is the use of an extended release agent which is a matrix of one or more polymers, each unit being in the form of an uncoated pellet or mini-tablet.

8.7 The question remaining is whether the skilled person, starting from the teaching of D27, in particular example 4, would arrive at the subject-matter of claim 1 of auxiliary request 11 in an obvious manner in order to solve the problem posed.

Documents D31-D33, D35 and D41 have been cited by the appellant-opponents to show that the claimed solution is obvious.

D31 is a common general knowledge document relating to capsules. It discloses capsules filled by mini-tablets on page 326 in Figure 14.41. On pages 357 and 358, D31 discusses the preparation of capsules filled with multiple units in the form of tablets or pellets (see page 357, par. 6.2.1) and specifies that said pellets or tablets may be in a coated form or in a matrix form embedding the active ingredient (see page 358).

D32 discloses the filling of solid dosage forms, such as tablets into hard gelatin capsules (see pages 170 and 171, Figure 12 on age 171).

D33 discloses also the filling of capsules with mini-tablets (see page 21).

D35 discloses the preparation of encapsulated mini-tablets providing a controlled release. D35 particularly points out that such systems are easier to manufacture compared to coated multi-particulate systems (see D35, page 12).

D41 discloses mini-tablets based on a matrix of wax and starch incorporated in a gelatin capsule (see pages 195-197). This document emphasizes the ease of manufacture of such mini-tablets (see page 195, right-hand column).

It emerges from these documents and their teachings that formulations comprising discrete units based on a matrix system and located within a capsule were well-known before the priority date. Thus, the claimed solution was not only known, but common. Equally known were the advantages linked to the solution, i.e. a simplified manufacture and the ease of providing

multiple doses with an appropriate pharmacokinetic profile.

Therefore, the claimed solution is not inventive and auxiliary requests 11 and 11a do not meet the requirements of Article 56 EPC.

9. Auxiliary request 12-14, 12a-14a - Inventive step

In comparison to claim 1 of auxiliary requests 11 and 11a, the subject-matrix of claim 1 of these requests has been amended by the introduction of the term "comprising" in "(ii) an extended-release agent **comprising** a matrix of one or more polymers" and it has been restricted to a specific active ingredient, namely **"and wherein the active pharmaceutical ingredient is galantamine or a pharmaceutically acceptable salt thereof".**

These features do not constitute a further technical difference over the closest prior art D27, and the conclusion reached for auxiliary requests 11 and 11a applies mutatis mutandis to these requests.

Consequently, auxiliary requests 12-14 and 12a-14a do not meet the requirements of Article 56 EPC.

Furthermore, the feature "(ii) an extended-release agent **comprising** a matrix of one or more polymers" does not comply with the requirements of Article 123(2) EPC for the reasons discussed in point 3.1.1 above.

10. Auxiliary requests 15-17, 15a-17a

In comparison to claim 1 of auxiliary requests 11 and 11a, the subject-matrix of claim 1 of these requests

has been restricted to a specific active ingredient, namely **"and wherein the active pharmaceutical ingredient is galantamine or a pharmaceutically acceptable salt thereof".**

This feature does not constitute a further technical difference over the closest prior art D27, and the conclusion reached for auxiliary requests 11 and 11a applies mutatis mutandis to these requests.

Consequently, auxiliary requests 15-17 and 15a-17a do not meet the requirements of Article 56 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

3. The request of appellant-opponent 02 for reimbursement of the appeal fee is rejected.

The Registrar: The Chairman:

B. Atienza Vivancos A. Usuelli

Decision electronically authenticated