Internal distribution code:

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

Datasheet for the decision of 17 June 2014

Case Number: T 2438/12 - 3.3.07

Application Number: 00117629.6

Publication Number: 1078628

IPC: A61K9/26, A61K31/4439, A61P1/04

Language of the proceedings: EN

Title of invention:
Multiple unit tableted dosage form

Patent Proprietor:
AstraZeneca AB

Opponent:
Hexal AG

Relevant legal provisions:
EPC Art. 100(c), 112(1)(a)

Keyword:
Grounds for opposition - added subject-matter (yes)
Referral to the Enlarged Board of Appeal - (no)

Decisions cited:
T 0330/05, T 0181/08, T 0783/09, T 1050/09

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2438/12 - 3.3.07

D E C I S I O N
of Technical Board of Appeal 3.3.07
of 17 June 2014

Appellant: (Patent Proprietor)	AstraZeneca AB 151 85 Södertälje (SE)
Representative:	HOFFMANN EITLE Patent- und Rechtsanwälte Arabellastrasse 4 81925 München (DE)
Respondent: (Opponent)	Hexal AG Industriestrasse 25 83607 Holzkirchen (DE)
Representative:	Hamm, Volker Maiwald Patentanwalts GmbH Jungfernstieg 38 20354 Hamburg (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 19 October 2012 revoking European patent No. 1078628 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman: J. Riolo
Members: D. Semino
P. Schmitz

Summary of Facts and Submissions

I. The appeal of the patent proprietor (appellant) lies against the decision of the opposition division announced at the oral proceedings on 13 September 2012 to revoke European Patent 1 078 628. The patent was granted on the basis of 19 claims, claim 1 reading as follows:

"1. An oral pharmaceutical multiple unit tablet dosage form comprising tablet excipients and individually enteric coating layered units of a core material containing active substance in the form of omeprazole or one of its single enantiomers or an alkaline salt of omeprazole or one of its single enantiomers, optionally mixed with alkaline compounds and pharmaceutically acceptable excipients, the core material is covered with one or more layer(s), of which at least one is an enteric coating layer, characterized in that:
• the enteric coating layer has a thickness of more than 20 µm;
• the enteric coating layer comprises a plasticizer in the amount of 15-50 % by weight of the enteric coating layer polymer(s);
• the enteric coating layer comprises a methacrylic acid copolymer;
• the enteric coating layer has mechanical properties such that the compression of the individual units mixed with the tablets excipients into the multiple unit tableted dosage form does not significantly affect the acid resistance of the individually enteric coating layered units;
• the amount of the enteric coating layered pellets constitutes less than 60 % by weight of the total tablet weight; and

• the pellets covered with the enteric coating layer are further coated with one or more overcoating layer(s)."

II. A notice of opposition was filed in which revocation of the patent in its entirety was requested on the grounds of lack of inventive step (Article 100(a) EPC). During opposition proceedings a further ground under Article 100(c) EPC was introduced.

III. The decision was based on the patent as granted as main request and on two sets of claims filed with letter of 13 August 2012 as second and third auxiliary requests and renumbered as first and second auxiliary requests during the oral proceedings on 13 September 2012.

Claim 1 had the same wording in the first and second auxiliary requests and corresponded to claim 1 as granted with the amendment of the lower limit for the amount of plasticizer from 15 to 20 % by weight of the enteric coating layer polymer(s).

IV. The decision under appeal can be summarised as follows:

a) the original application did not comprise an explicit combination of the five features added to claim 1 as granted, each of which was disclosed as an embodiment on its own;

b) the combination of these features could not be derived from the examples and the features did not all serve the same purpose; moreover, the subject-matter claimed was not a combination of preferred embodiments;

c) the combination of the five features therefore did not find a basis in the application as originally filed, which was in line with decision T 0181/08 of 25 October 2011, which dealt with a very closely related patent;

d) the same arguments applied to claim 1 of the first and second auxiliary requests, whose subject-matter was not merely a combination of the most preferred embodiments.

V. The appellant lodged an appeal against that decision. With the statement setting out the grounds of appeal dated 22 February 2013, the appellant maintained the main request (i.e. maintenance of the patent as granted) and submitted two sets of claims as first and second auxiliary requests, which were identical to the first and second auxiliary requests, on which the decision under appeal was based.

VI. Oral proceedings were held on 17 June 2014. During the oral proceedings the appellant filed in writing the following questions to be referred to the Enlarged Board of Appeal:

"1. Is Art 123(2) EPC infringed in a situation where the claimed subject matter is the result of a combination of two or more preferred features that are independently disclosed to contribute to the same technical effect.

2. If the answer to question 1 above is yes, would Art 123(2) EPC still be infringed if the claimed subject matter is the result of a combination of all preferred features that are independently disclosed to contribute to the same technical effect."

VII. The arguments of the appellant can be summarised as follows:

Patent as granted - amendments

a) The key to the success of a product according to the invention was the maintenance of the structural integrity of the enteric coating layer of the coated pellets during compression of said units to form a tablet. The five features included in granted claim 1 which had been added to claim 1 as originally filed all independently addressed this issue and their combination was the best mode of realisation according to the application as originally filed. The inclusion of a plasticizer in an amount of 15-50 % by weight in the enteric coating layer corresponded to original claim 4 and gave the desired flexibility and hardness to the layer, so as to guarantee its integrity. Also the choice of an adequate thickness of the enteric coating layer according to a further preferred feature of the invention contributed to keeping the required integrity. The choice of methacrylic acid copolymer as the polymer material for the coating was not an arbitrary choice among many different equivalent alternatives, as the vast majority of the examples in the original application included the copolymer and had the required acidic resistance, which showed that the desired integrity was achieved by using the specific polymer. The limitation on the maximum amount of pellets corresponded to setting a minimum amount of the cushioning material and thus also served to ensure the mechanical stability of the enteric coating layer, as was evident to the

skilled person also without mentioning this scope in the application. The addition of an over-coating layer also served to further protect the enteric coating layer towards cracking during the compaction process. No other feature was presented in the application as filed as addressing the key issue of the invention; with regard to the Vickers hardness this was not an additional product feature, but was the inevitable result of a product having the other features of the claim. On that basis the combination in claim 1 as granted was not an arbitrary pick from many equal alternatives in the application as filed, but was the result of the clear guidance presented in the application as filed, as to how the skilled person could obtain the best possible result. As such, it could be clearly and unambiguously derived from the application as filed.

b) That finding was not in contrast with the conclusions in T 0181/08. In that case added matter was the result of the inclusion of two preferred features from the original description, while leaving out some others. This reasoning did not apply to the present case, as granted claim 1 combined all the measures which were identified to positively influence the mechanical properties of the enteric coating layer. The conclusion that the amendments were allowable was in agreement with T 1050/09 of 7 April 2011, which acknowledged a basis for the combination of two independent preferred embodiments which could be combined without difficulties, even if the application did not state *expressis verbis* that said embodiments could be combined with each other. A similar

approach was followed also in T 0330/05 of 30 August 2005 and T 0783/09 of 25 January 2011.

Auxiliary requests - amendments

c) If the arguments related to the combination of preferred features were not successful for claim 1 as granted, even stronger arguments applied to claim 1 according to the auxiliary requests where the preferred range for the amount of plasticizer had been replaced by the most preferred one.

Request of referral

d) If the Board were not minded to follow the approach in T 1050/09, then a question should be referred to the Enlarged Board of Appeal to clarify to what extent preferred features which are disclosed to contribute to the same technical effect in the original application can be combined with each other without infringing the requirements of Article 123(2) EPC. This was justified, as the same standards should be applied to all cases independently of the technical field.

VIII. The arguments of the opponent (respondent) can be summarised as follows:

Patent as granted - amendments

a) The situation with regard to the amendments was very similar to the one in case T 0181/08 and there was no reason to deviate from the conclusion reached therein. While the five features added to original claim 1 were disclosed in isolation in the application as filed, there was no disclosure

of their combination therein. As to the scope of the features, the methacrylic acid copolymer was just one of several equivalent polymers and its use did not give any better result, the over-coating layer was an optional feature and the limitation of the maximum amount of pellets was not related to a specific scope. As in case T 0181/08 guidance was missing in the original application to lead the skilled person to the claimed combination.

b) The present situation did not correspond to the one in T 1050/09, as that decision concerned the combination of two preferred features, while in the present case five features were combined some of which (e.g. the specific polymer) were not preferred ones. T 0330/05 and T 0783/09 were even less relevant.

Auxiliary requests - amendments

c) The same arguments outlined for claim 1 as granted with regard to the amendments applied to claim 1 according to the auxiliary requests.

Request of referral

d) There was no need to refer any question to the Enlarged Board.

IX. The appellant requested that the decision under appeal be set aside and that the case be remitted to the opposition division for the discussion of inventive step on the basis of the claims as granted (main request) or alternatively, on the basis of the first or second auxiliary requests filed with the statement

setting out the grounds of appeal dated 22 February 2013. Should the Board intend not to allow any of these requests, the appellant requested that the questions of law filed in writing during the oral proceedings before the Board be referred to the Enlarged Board of Appeal.

X. The respondent requested that the appeal be dismissed.

Reasons for the Decision

Patent as granted - amendments

1. Claim 1 of the granted patent corresponds to claim 1 as originally filed with the addition of the following five features:
i. the enteric coating layer has a thickness of more than 20 µm;
ii. the enteric coating layer comprises a plasticizer in the amount of 15-50 % by weight of the enteric coating layer polymer(s);
iii. the enteric coating layer comprises a methacrylic acid copolymer;
iv. the amount of the enteric coating layered pellets constitutes less than 60 % by weight of the total tablet weight; and
v. the pellets covered with the enteric coating layer are further coated with one or more overcoating layer(s).

1.1 While it is not disputed that a basis for the individual features in isolation can be found in the original application, the crucial issue concerns whether the combination of the five features with the subject matter of original claim 1 is directly and unambiguously derivable therefrom.

1.2 With regard to the main argument of the appellant that all added features address the same problem, namely maintain the structural integrity of the enteric coating layer during compression to form a tablet, so that their combination was the best mode of realisation of the invention according to the original application, the Board agrees with the appellant only in part.

1.2.1 It is indeed a crucial feature of the product disclosed in the application as filed that "the enteric coating layer has mechanical properties such that the compression of the individual units mixed with the tablets excipients into the multiple unit tableted dosage form does not significantly affect the acid resistance of the individually enteric coating layered units" (original claim 1). This is confirmed in the description of the invention where it is specified that "if the enteric coating is damaged during compression of the enteric layered units, the acid resistance of said enteric coating layer in the manufactured tablet will not be sufficient, and the manufactured tablet will not fulfill standard requirements on enteric coated articles" (page 4, lines 22 to 26) and that in order for the compaction process not to significantly affect the acid resistance of the enteric coating layered particles "the mechanical properties such as the flexibility and hardness as well as the thickness of the enteric coating layer(s) must secure that the requirements on enteric coated articles" are accomplished (page 6, lines 4 to 9). In other words, the desired scope is achieved by means of the mechanical properties, such as the flexibility and hardness, as well as of the thickness of the enteric coating layer(s).

1.2.2 As to the thickness of the enteric coating layer (feature i.), it is specified that "to obtain an acceptable acid resistance of the multiple unit tableted dosage form according to the invention, the enteric coating layer(s) constitutes a thickness of approximately at least 10 µm, preferably more than 20 µm" (page 11, lines 2 to 6).

1.2.3 As to the mechanical properties and their relationship with the presence and the amount of the plasticizer (feature ii.), it is disclosed that the "enteric coating layers contain pharmaceutically acceptable plasticizers to obtain the desired mechanical properties, such as flexibility and hardness of the enteric coating layers" (page 10, lines 15 to 16) and that the "amount of plasticizer is optimized for each enteric coating layer formula, in relation to selected enteric coating layer polymer(s), selected plasticizer(s) and the applied amount of said polymer(s), in such a way that the mechanical properties, i.e. flexibility and hardness of the enteric coating layer(s), for instance exemplified as Vickers hardness, are adjusted so that the acid resistance of the pellets covered with enteric coating layer(s) does not decrease significantly during the compression of pellets into tablets", the amount of plasticizer being "usually above 10 % by weight of the enteric coating layer polymer(s), preferably 15 - 50 %, and more preferably 20 - 50 %".

1.2.4 However, the same link with the main property of the product according to the original application cannot be made with the choice of methacrylic acid copolymer as the polymer of the enteric coating layer (feature iii.). In the general part of the description several polymers, including methacrylic acid copolymers, used

separately or in combinations, are listed as equally valid alternatives (page 10, lines 9 to 13). Moreover, while it is true that in most of the examples methacrylic acid copolymer is used in the enteric coating layer, no weight is given to this choice, no relationship of the choice of the polymer to the mechanical properties and to the acid resistance is indicated and equally satisfactory acid resistance is obtained both when methacrylic acid copolymer is used and when other polymers are employed (see the results in table 1 on page 29 of the original application, where in example 6 hydroxypropyl methylcellulose phthalate is used and in example 13 hydroxypropyl methylcellulose acetate succinate is used).

1.2.5 With regard to the amount of pellets (feature iv.), a single sentence is present in the original description, which reads "The amount of enteric coating layered pellets constitutes less than 75 % by weight of the total tablet weight and preferably less than 60 %" (page 12, lines 9 to 10). No reference is given to an intended purpose for this feature. While the skilled person may imagine that the relative amount of the pellets and the excipients may have an influence on the possible damages to the pellets during compression, the same would apply to other features equally mentioned in the original application (e.g. the size of the pellets or the choice of the excipients), so that without any direct or indirect reference to the relevance of the amount of pellets it cannot be directly and unambiguously derivable from the application as filed that this feature is one of the crucial ones in determining the achievement of the desired goal of the invention.

1.2.6 As to the presence of an over-coating layer (feature v.), it is disclosed that pellets "covered with enteric coating layer(s) may further be covered with one or more over-coating layer(s)" (page 11, lines 12 to 13) and that said "over-coating layer may further prevent potential agglomeration of enteric coating layered pellets, further protect the enteric coating layer towards cracking during the compaction process and enhance the tableting process" (page 11, lines 23 to 25). As to the relationship of the over-coating layer with maintenance of acid resistance during compression, it is then specified that it is related to the Vickers hardness of both the enteric coating layer and the over-coating layer in a passage, which reads "To obtain well functioning enteric coating layered pellets with a reasonable amount of enteric coating layer material and which pellets can be compressed into tablets without significantly affecting the acid resistance, an enteric coating layer surface with a Vickers hardness of less than 8 is preferred. In case the pellets are covered with an over-coating layer the Vickers hardness of the enteric coating layer must be characterized before the over-coating layer is applied. A harder over-coating layer (Vickers hardness higher than 8) can be applied on top of a flexible and softer (Vickers hardness less than 8) enteric coating layer with retained acid resistance during compaction" (page 12, lines 22 to 30).

1.3 Therefore, on the basis of the disclosures related to the five features added to original claim 1, if the skilled person reading the original application aimed at achieving the main object of the invention, namely maintenance of acid resistance during compression, by building up a preferred embodiment, which could be considered as implicitly disclosed, he would reasonably

choose features i. and ii., possibly include feature v. (however, not with the present wording encompassing any over-coating, also for instance merely taste-masking ones, but only with a specific selection of the materials of the coatings, so that the appropriate Vickers hardnesses are obtained), but not necessarily include features iii. and iv.

1.4 The combination of features i. to v. which are independently disclosed in the original application with the subject-matter of original claim 1 cannot be considered therefore as the best mode of realisation of the invention, which would be on that basis directly and unambiguously derivable from the original disclosure, but amounts to the arbitrary selection and combination of five features out of the several ones disclosed independently in the original application.

1.5 In this respect it is relevant to add that there are features not included in granted claim 1 which are disclosed as being related to the main scope of the invention (e.g. the Vickers hardness of the layers, see citations on point 1.2.6, above) and other features also not included in the claim which are indicated as preferred ones (e.g. the size of the core materials of the pellets, page 7, lines 22 to 23). This is confirmed also by the original dependent claims, which disclose feature i., although with a different minimum value (claim 5), feature ii. (claim 4) and feature v. (claim 9), but do not mention features iii. and iv., while they disclose several other features (e.g. the Vickers hardness and the size of the seeds in claims 6 and 16).

1.6 On that basis the subject-matter of granted claim 1 is not directly and unambiguously derivable from the application as originally filed, so that it extends

beyond the content of the application as filed. The ground of opposition under Article 100(c) therefore stays against maintenance of the patent as granted.

1.7 This conclusion is not in contradiction with the case law cited by the parties.

1.7.1 In T 0181/08, which related to a parallel case, claim 1 according to the requests decided upon included two to four of the five features considered here. In spite of this difference in the facts, it was also concluded in T 0181/08 that the combination of features claimed therein extended beyond the content of the application as filed. In view of that there is no need for the Board of any further analysis of the decision.

1.7.2 As to T 1050/09, it concerned a case in which it was considered that the combination of two features disclosed in two separate dependent claims (claims 3 and 4) was disclosed in the application as filed even if the application did not state *expressis verbis* that said embodiments could be combined with each other. In that case it was apparent to the person skilled in the art that they related to two independent preferred aspects of the claimed invention which could be combined without difficulty (point 3 in the reasons).

1.7.3 The case differs substantially from the present one in which five independent features coming in prevalence from the description were combined with the subject-matter of original claim 1 and it was alleged that their combination was directly and unambiguously derivable from the original application in view of the fact that they addressed the main object of the original application, while in T 1050/09 no analysis was made as to the relationship between the purpose of

the two added features (which were actually considered as independent ones). In view of the different circumstances, the fact that a different conclusion was reached in the present case cannot be seen as a deviation from the findings in T 1050/09.

1.7.4 Decisions T 0783/09 and T 0330/05 are even less relevant. The former concerns a case in which it was considered that all combinations resulting from the combination of the elements of two lists were directly and unambiguously disclosed in the original application (point 5.7 in the reasons), so that the selection of three of them in claim 1 resulted from the deletion of the remaining elements of the list and did not cause an extension of subject-matter beyond the content of the application as filed (points 6.2 and 6.3 in the reasons). The latter decision relates to a case in which it was accepted that a combination of three features did not go beyond the original disclosure, as there was an explicit disclosure in the application as originally filed of the combination of two of them and the third one resulted from the indication of a specific material from a list, each element of which was clearly and unambiguously disclosed as an appropriate alternative material (points 3 and 3.1 in the reasons).

1.7.5 As the circumstances of both cases are profoundly different from those of the present one, no contradiction can be found with the present findings.

Auxiliary requests - amendments

2. Claim 1 has an identical wording in the first and second auxiliary requests, which wording corresponds to claim 1 as granted with the amendment of the lower

limit for the amount of plasticizer from 15 to 20 % by weight of the enteric coating layer polymer(s).

2.1 While basis for the amended feature may be found in the same sentence as for the unamended one (see point 1.2.3, above), whereby the former corresponds to the most preferred range for the amount of plasticizer and the latter to the preferred range, such an amendment has no bearing on the reasoning which leads to the conclusion that the combination of features in granted claim 1 is not directly and unambiguously derivable from the application as originally filed. The same reasoning therefore applies (see point 1, above), which leads to the conclusion that the subject-matter of claim 1 of the first and second auxiliary requests extends beyond the content of the application as filed.

Request of referral

3. The main argument of the appellant as to the necessity of the referral related to an alleged conflict between the conclusion reached in the present case and the approach taken in T 1050/08. As the Board came to the conclusion that the circumstances of the two cases differed, so that a deviation from the findings in T 1050/09 could not be seen (see points 1.7.2 and 1.7.3, above), this argument cannot be followed.

3.1 On top of that, the questions formulated by the appellant refer to a situation regarding a combination of preferred features that are independently disclosed to contribute to the same technical effect (two or more such features in question 1 and all such preferred features in question 2) which was neither relevant in T 1050/09, which related to two independent preferred aspects, but did not analyse whether they contributed

to the same technical effect (see point 3 in the reasons), nor applies to the present case, where at least some of the added features do not relate to the same technical effect (see points 1.2 to 1.3, above).

3.2 On that basis, the request for referral must be refused.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Rauh J. Riolo

Decision electronically authenticated