Datasheet for the decision
of 31 October 2006

Case Number: T 0584/06 - 3.3.05
Application Number: 97610023.0
Publication Number: 0812808
IPC: C02F 5/10
Language of the proceedings: EN
Title of invention:
Water softening tablets
Patentee:
CLEANTABS A/S
Opponent:
HENKEL KGaA
Headword:
Softening tablets/CLEANTABS
Relevant legal provisions:
EPC Art. 123(2)
Keyword:
"Amendment not allowable - generalisation of a feature"
"Added feature isolated and extracted from examples"
"Added feature limiting but providing technical contribution"
Decisions cited:
G 0001/93, T 1067/97
Catchword:
Case Number: T 0584/06 - 3.3.05

DECISION
of the Technical Board of Appeal 3.3.05
of 31 October 2006

Appellant: CLEANTABS A/S
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 24 February 2006 revoking European patent No. 0812808 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: M. Eberhard
Members: B. Czech
S. Hoffmann
Summary of Facts and Submissions

I. The appeal is from the decision of the opposition division concerning the revocation of European patent No. 0 812 808.

II. Independent claim 1 of the patent as granted reads as follows (amendments with respect to claim 1 of the application as filed highlighted by the board):

"1. Water softening tablets for use together with a conventional detergent for machine laundry washing, characterised in that in addition to optional usual adjuvants and additives they comprise

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>a polyfunctional carboxylic acid and/or a salt thereof calculated as trisodium citrate dehydrate</td>
<td>10 to 70% by weight</td>
</tr>
<tr>
<td>a carbonate and/or bicarbonate</td>
<td>15 to 45% by weight</td>
</tr>
<tr>
<td>a binder</td>
<td>1 to 6% by weight</td>
</tr>
<tr>
<td>a polymer</td>
<td>2 to 19% by weight</td>
</tr>
<tr>
<td>a layered silicate and/or alkali metal silicate</td>
<td>0 to 45% by weight</td>
</tr>
<tr>
<td>a disintegrating agent</td>
<td>2 to 15% by weight</td>
</tr>
<tr>
<td>a precipitation inhibitor</td>
<td>0 to 5%, by weight</td>
</tr>
</tbody>
</table>

and that one tablet disintegrates in less than 45 seconds when submerged in 800 ml water at 20°C without stirring".

III. With a letter dated 22 December 2005, the patent proprietor had filed three sets of claims as first to third auxiliary requests.

Claim 1 according to the first auxiliary request has an amended first part, which is followed by the same indications concerning the relative amounts of the components as in claim 1 as granted. The amended first part reads as follows (highlighted parts are amendments to claim 1 of the application as filed):

"1. Water softening tablets *for use together with a conventional detergent for machine laundry washing* whereby one tablet disintegrates in less than 45 seconds when submerged in 800 ml water at 20°C without stirring, characterised in that in addition to optional usual adjuvants and additives they comprise …"

Claim 1 according to the second auxiliary request differs from claim 1 as granted in that the upper limit of the range for the amount of the "polymer" component comprised in the tablets is lowered to 15% by weight.

Claim 1 according to the third auxiliary request reads as follows (highlighted parts indicate amendments with respect to claim 1 of the application as filed):

"1. *Use of* water softening tablets *comprising* in addition to optional usual adjuvants and additives

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>a polyfunctional carboxylic acid and/or a salt thereof calculated as trisodium citrate dehydrate</td>
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<td>a carbonate and/or bicarbonate</td>
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a binder | 1 to 6% by weight
---|---
a polymer | 2 to 15% by weight
a layered silicate and/or alkali metal silicate | 0 to 45% by weight
a disintegrating agent | 2 to 15% by weight
a precipitation inhibitor | 0 to 5%, by weight,

of which one tablet disintegrates in less than 45 seconds when submerged in 800 ml water at 20°C without stirring, together with a conventional detergent for machine laundry washing."

IV. The facts and evidence relied upon by the opponent include:


D2: EP-A-0 628 627

D3: EP-A-0 504 091 and

D6: WO-A-95/21908

E1: An experimental report concerning "Tablet Disintegration Experiments" dated 21 December 2004 ("Enclosure 1").

The opposition division, referring to decision T 1067/97 of 4 October 2000 (not published in the OJ EPO), concluded that claim 1 as granted (main request) contained subject-matter extending beyond the content
of the application as filed, contrary to the requirements of Article 123(2) EPC. The objection was occasioned by the incorporation of the following feature ("feature A" hereinafter) into claim 1 during the granting procedure: "one tablet disintegrates in less than 45 seconds when submerged in 800 ml water at 20°C without stirring". The respective claims 1 according to each of the three auxiliary requests were objected to on the same ground since they also contain feature A. Consequently, all the requests of the patent proprietor were refused.

V. In its statement of grounds of appeal the appellant (patent proprietor), referring to several passages of the patent, argued that claim 1 of the patent as granted met the requirements of Article 123(2) EPC. Referring to decision G 1/93 (OJ EPO 1994, 541), it argued that the opposition division interpreted Article 123(2) EPC too strictly.

VI. In its reply the respondent (opponent), referring to decision T 1067/97, maintained that the incorporation of feature A into claim 1 was an amendment not meeting the requirements of Article 123(2) EPC. In its view, this was confirmed by decision G 1/93 as far as applicable.

VII. Oral proceedings were held on 31 October 2006.

VIII. The appellant requested that the decision under appeal be set aside and the patent be maintained as granted (main request) or in the alternative on the basis of the claims according to one of the auxiliary requests 1 to 3 filed with letter of 22 December 2005.
The respondent requested that the appeal be dismissed or in the alternative that the case be remitted to the first instance for further prosecution.

IX. The arguments of the parties can be summarised as follows:

The appellant argued that the skilled person reading the application would be fully aware that a fast or easy dissolution was an important requirement for ensuring the performance of water softening tablets of the type to be used together with a conventional detergent for machine laundry washing. From the passage on page 8 of the application as filed entitled "Disintegration period" the reader would easily conclude that "fast" or "easily" had the meaning expressed in feature A, since no other time or time interval than "less than 45 seconds" was disclosed. The reader would not understand that this requirement should only apply to the tablets of example 1. Hence claim 1 as granted met the requirement of Article 123(2) EPC. The appellant pointed out that the amendment in question had been made to overcome objections raised during examination on the basis of D3. It had seen no other way for cutting off that part of the scope of the claim which did not relate to softening tablets of the type envisaged according to the invention, and the examining division had accepted the amendment. The purpose of Article 123(2) EPC was to protect third parties from being disadvantaged by the incorporation of an undisclosed feature. Since the requirement inserted was well known in the art, as illustrated e.g. by D2, and moreover limited the scope of claim 1, the
amendment should be allowed on the basis of a fair balance of the interests of the parties. According to another line of argument, it considered that feature A was one of the goals to be obtained or in other words a "requirement" for ensuring the performance of the water softening tablet, but not a technical teaching or instructions on how to obtain this goal. It considered the present case to be similar to the case underlying G 1/93 where the undisclosed criterion "substantially free of striae", could also be considered as "natural requirement" for an optical membrane, i.e. as a merely limiting feature without technical contribution. Similarly, there was no new technical contribution in requiring that a water softening tablet of the type claimed should disintegrate in less than 45 seconds. Accordingly, this compulsory feature merely limited the scope of protection conferred by the patent as granted by excluding protection for part of the subject-matter originally covered by the application as filed. Moreover, in the present case the added feature even found some basis in the application as filed. In view of G 1/93, (headnote 2) added feature A was thus not to be considered as subject-matter which extends beyond the content of the application as filed within the meaning of Article 123(2) EPC. In connection with the discussion of the three auxiliary requests at the oral proceedings, the appellant did not present additional arguments in support of the allowability of the incorporation of feature A into the respective claims 1.

According to the respondent there was no general teaching in the application as filed that all tablets should disintegrate in less than 45 seconds. The speed of dissolution and disintegration was presented as
important in the general description of the application as filed, but the more specific feature A was only disclosed in example 1, and exclusively in connection with the eight specific tablets described in this example. According to the respondent claim 1 had been restricted by the incorporation of feature A, a feature which had been isolated and extracted from combinations of features disclosed at origin. However, the disintegration speed of a tablet depended on and was thus inextricably linked to some other factors, i.e. the chemical composition, and in particular the relative amounts of disintegrating agent and of the bicarbonate/carboxylic acid components, the mass and the dimensions of the tablets, as well as the compression used in preparing them. This was corroborated by statements in D1, D2, D3 and D6, as well as the experimental data supplied by the appellant. The data showed that not all tablets having a composition according to claim 1 disintegrated in less than 45 seconds. There was thus a close functional/structural relationship between the disintegration speed of a tablet and the other factors mentioned. Referring to T 1067/97, it concluded - with respect to all of the appellant's requests - that the incorporation of feature A into claim 1 was not allowable under Article 123(2) EPC. The reasons for which the appellant had incorporated feature A into claim 1 were not relevant in the assessment of whether the amendment was allowable or not. In the respondent's view, feature A was a technical feature not only excluding subject-matter from claim 1 but also providing a technical contribution to the subject-matter of the claimed invention. The speed of dissolution and disintegration had been presented as an
important aspect in the application as filed. Feature A implied a selection not originally disclosed and was supposed to render the claimed subject-matter inventive. Hence, the amendment in question was also not allowable considering G 1/93.

Reasons for the Decision

Main request

1. Claim 1 as originally filed was directed to water softening tablets characterised by their chemical composition. During the examination procedure claim 1 has been amended inter alia by the insertion of feature A. The reasons for which this has been done are not relevant when examining the compliance of the patent as granted with the requirement of Article 123(2) EPC, i.e. when comparing the application as filed with the patent as granted. Moreover, Article 123(2) EPC must be applied as it stands even in an "inescapable trap" situation as addressed in G 1/93, and it does not matter that the amendment has been approved by the examining division, see G 1/93, reasons point 13.

2. As pointed out by the appellant, it is mentioned in the general description of the application as filed that the tablets according to the invention have a "fast rate of dissolution" (page 2, line 15), that they should be "easily dissolved" (page 3, line 24) in the washing water, that the (bi)carbonate component "further improves the rate of dissolution of the water softening tablets" (page 4, lines 26 to 27) and that a disintegrating agent may advantageously be added for
"accelerating the disintegration" of the tablets (page 7, lines 10 to 11). It can thus be understood from the application as filed that the compositions falling under claim 1 as filed dissolve "fast" or "easily" and that their disintegration rate can be accelerated by adding a disintegration agent. However, the general part of the description contains no quantitative definitions of a "fast", easy or "improved" dissolution or of an accelerated disintegration. The appellant has not provided evidence corroborating its allegation that feature A was a requirement well known in the art. From D2 it can merely be derived that a water softening tablet should dissolve rapidly (page 2, lines 28 to 37), but the document contains no further quantitative indications in this respect.

3. The paragraph on page 8 of the application which is entitled "Disintegration period" does not belong to the general description but forms part of example 1. As indicated by the board during the oral proceedings, said paragraph merely indicates the method used for evaluating the disintegration of the eight exemplified tablets referred to in table 1. More specifically, it appears from said paragraph that what is actually measured is not the period of time necessary for disintegrating a tablet but the "percentage residue" after the tablet has been submerged in 800 ml water at 20°C for 45 seconds without being stirred. However, the quoted paragraph does not convey any information concerning a particular value in terms of "percent residue" to be generally achieved in less than 45 seconds. The skilled person cannot for instance gather from the quoted paragraph taken alone that, generally,
a water softening tablet having a composition as given in claim 1 as filed or in claim 1 as granted would necessarily disintegrate in less than 45 seconds. Hence, the said paragraph does not provide a basis for considering that only a disintegration of the tablet in accordance with feature A could be qualified as fast, easy, improved or accelerated in the sense of the general description.

4. Table 1 on pages 11 to 12 of the application as filed summarises the results obtained for each of the eight different tablets prepared and tested according to example 1.

4.1 It can inter alia be gathered from said table that each of the eight tablets disintegrates without leaving a residue within 45 seconds, see the first row of data in table 1 on page 12: "Residue (%) after 45 seconds at 20°C" and the value "0". In conjunction with the general description it can be understood that the disintegration of the eight particular tablets described in table 1 is to be considered as accelerated in the sense of the application as filed.

4.1.1 It is indicated on page 8, lines 14 to 17 of the application as filed that each of the eight tablets prepared had a weight of 20 g, a cross-section of 33 x 33 mm and a height of from 14 to 16 mm. From the data reported in E1 (page 3, table 1), it can be derived that the disintegration times of tablets having a composition ("CL8") according to claim 1 as granted depend on their weight, size and the press force used in their preparation. What can clearly be gathered from these data is that for a tablet of a given weight and
of given length x width dimensions, an increased press force leads to an increased disintegration time. Statements in D1 (page 2, lines 31 and 32) and D6 (page 1, second paragraph, second and third sentences) confirm the effect of the compacting press force. Moreover, it was undisputed that the relative amounts of components such as the disintegrating agent and the couple consisting of polyfunctional carboxylic acid and (bi)carbonate also have an influence on the disintegration time of the tablets. This is confirmed by the application as filed (page 4, fifth paragraph and page 7, third paragraph), by D1 (page 8, lines 2 to 5), D2 (page 3, lines 6 to 13) and D3 (page 5, lines 18 to 20).

4.2 The fact that the eight specific tablets of example 1 disintegrate fast enough so that no residue remains after 45 seconds under the given conditions does not as such imply that this would also be the case for any other tablet having a chemical composition according to claim 1 as granted.

5. The appellant has itself pointed out that the incorporation of feature A amounted to "excluding protection for a part of the subject-matter originally covered by the application as filed".

5.1 The experimental data reported in E1, page 3, table 1, column "Disintegration time", indeed show that even though the tablets tested have a chemical composition ("CL8") as defined in claim 1 as granted, they do not necessarily disintegrate within 45 seconds.
5.2 The appellant has argued that the two examples shown in table 1, having higher disintegration times of 50 and 53 seconds respectively, were obtained using press forces higher than necessary for achieving tablets of "sufficient strength". It also indicated that water softening tablets to be used in laundry washing had dimensions which should not be assumed to be "unrealistically big".

5.3 However, the general part of the description does not provide indications concerning the measures to be taken in terms of chemical composition, weight, size, shape and press-force applied in order to obtain tablets which not only fall within the compositional definition in claim 1 but which also disintegrate in less than 45 seconds while at the same time being only of "sufficient strength" and not "unrealistically big".

6. Even considering table 1 of the description, the explanations concerning the method used for evaluating the disintegration behaviour of the tablets and the general description of the application in conjunction, it cannot be clearly and unambiguously gathered therefrom that a disintegration time of less than 45 seconds according to feature A was generally aimed at irrespective of other aspects affecting the disintegration time of the tablet such as its weight, size, shape, specific chemical composition and the press-force used in its preparation. There is thus no general technical teaching, and hence no disclosure, in the application as filed of how to obtain tablets having a composition differing from the ones described in example 1 but falling within the compositional ranges claimed and also disintegrating in less than 45
seconds. By virtue of the amendment in question, claim 1 as granted also relates to tablets with feature A but differing from the eight exemplified ones in terms of their other properties (e.g. weight, size, shape, chemical composition, strength).

The patent application has thus been amended in such a way that the granted patent contains subject-matter which extends beyond the content of the application as filed, contrary to the requirement of Article 123(2) EPC.

7. In the present case, claim 1 has been restricted by the incorporation of feature A, but this feature has been isolated and extracted from its combination with the other data given for the eight tablets according to example 1. At least some of the data given in example 1 concern features of the tablet (weight, size, shape, chemical composition and strength) which may undisputedly affect the disintegration time. There is thus a clear functional relationship between feature A and the said other features. Hence, the board's finding concerning the allowability of the amendment is also in line with earlier jurisprudence of the boards of appeal, see e.g. T 1067/97, point 2.1.3 of the reasons, where the following is indicated: "According to established jurisprudence of the boards of appeal, if a claim is to be restricted to a preferred embodiment, it is normally not admissible under Article 123(2) EPC to extract isolated features from a set of features which have originally been disclosed in combination for that embodiment. Such kind of amendment would only be justified in the absence of any clearly recognisable
functional or structural relationship among said features".

8. The board can also not accept the appellant's argumentation based on G 1/93 for the following reasons:

8.1 As pointed out by the appellant, the added feature A can be regarded as a goal to be achieved, or as a "requirement" to be met by the tablets, and its wording as such is not a technical teaching of how to reach this goal. However, considering that before its amendment claim 1 covered tablets not meeting this requirement, the added expression is to be seen as a functional feature expressing that all the parameters affecting the disintegration speed, such as the types and relative amounts of the components, the compression used, and the size, shape and weight of the tablet, must be chosen such as to give the desired result.

8.2 Hence there can be no doubt that the added expression, irrespective of whether it is called a feature or a requirement, provides a "technical contribution" to the subject-matter of the claimed invention. Moreover, the board notes that feature A has been introduced into claim 1 in response to novelty and inventive step objections raised during substantive examination based on document D3 (see the appellant's letter dated 26 April 2001 and the communications of the examining division dated 20 July 1999, 24 March 2000 and 2 January 2001). By virtue of the amendment in question the appellant thus gained more distance from the prior art. In the board's view, this improvement of the appellant's position would be an unwarranted advantage in the sense of G 1/93 (point 9 of the reasons).
9. Since claim 1 does not meet the requirement of Article 123(2) EPC, the appellant's main request cannot be granted.

Auxiliary requests

10. The respective claims 1 of the three auxiliary requests differ respectively from claim 1 according to the main request in the following manner:

First auxiliary request:
   Feature A is moved to the pre-characterising part of the claim.

Second auxiliary request:
   The maximum amount of the polymer component comprised in the tablets is lowered from 19 to 15% by weight.

Third auxiliary request:
   The category of the claim is changed to the use of water softening tablets, the tablets having the composition as given in claim 1 of the second auxiliary request.

11. All the said claims 1 thus refer to water softening tablets and contain feature A. The proposed further amendments to claim 1 are not suitable for overcoming the objection under Article 123(2) EPC occasioned by the presence of feature A in claim 1 for the following reasons.
11.1 Moving feature A to the pre-characterising part of claim 1 according to the first auxiliary request does not change the definition of the tablets for which protection is sought.

11.2 It is not indicated in the application as filed that reducing the polymer component comprised in the tablet from 19 to 15% by weight would, without taking any further measures as referred to under point 5.3 herein above, lead to a disintegration in less than 45 seconds. The conclusion reached by the board with respect to the main request thus also applies to claim 1 according to the second auxiliary request.

11.3 Despite its category being changed to a use, claim 1 according to the third auxiliary request also refers to water softening tablets defined in the same objectionable manner as in claim 1 of the second auxiliary request.

11.4 Consequently, none of the three auxiliary requests is allowable either.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

C. Vodz M. Eberhard