DECISION
of 6 July 2005

Case Number: T 0859/03 - 3.3.06
Application Number: 94202007.4
Publication Number: 634483
IPC: C11D 3/10
Language of the proceedings: EN

Title of invention: -

Patentee: The Procter & Gamble Company

Opponent: Reckitt Benckiser PLC Unilever N.V.

Headword: Stabilized percarbonate/PROCTER & GAMBLE

Relevant legal provisions: EPC Art. 54, 56, 83, 84

Keyword:
"Sufficiency of disclosure (main request): yes"
"Clarity of claim 1 (main request): no - wording of the claim open to different equally valid interpretations"
"Novelty (first auxiliary request): yes"
"Inventive step (first auxiliary request): no - selection of particle size distribution not bringing about any unexpected effect"
"Inventive step (second auxiliary request): no"

Decisions cited: T 0190/99, T 1298/93, T 0506/95

Catchword: -
Case Number: T 0859/03 - 3.3.06

DECISION
of the Technical Board of Appeal 3.3.06
of 6 July 2005

Appellant: The Procter & Gamble Company
(Proprietor of the patent) One Plaza
Cincinnati
Ohio 45202 (US)

Representative: Lawrence, Peter Robin Broughton

Respondent: Reckitt Benckiser PLC
(Opponent 01) Damsom Lane
Hull HU8 7DS (GB)

Representative: Instone, Terry

Representative: (Opponent 02) Unilever N.V.
Weena 455
NL-3013 AL Rotterdam (NL)

Representative: Waldren, Robin

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 16 June 2003 revoking European patent No. 634483 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. Krasa
Members: L. Li Voti
A. Pignatelli
Summary of Facts and Submissions

I. The present appeal is from the decision of the Opposition Division to revoke the European patent No. 0 634 483, relating to a stabilised bleaching composition.

II. In their notices of opposition the Opponents 01 and 02 sought revocation of the patent on the grounds of Articles 100(a) and (b) EPC and referred inter alia to the following documents:

(1) US-A-4171280;

(1a) calculation of the average particle size of the commercial product of example 5 of document (1);

(3) US-A-4016090;

(4) GB-A-1451719;

(5) JP-A-58213099 (English translation);

(8) WO-A-9206163;


III. The decision under appeal was based on the sets of claims according to the main and to an auxiliary request containing 9 claims and 8 claims, respectively.
Claim 1 according to the main request read as follows:

"1. A particulate laundry detergent composition or machine dishwashing composition comprising:
(a) particles of an alkali metal percarbonate salt and
(b) particles of alkali metal carbonate or bicarbonate, said particles having a mean particle size of 250 µm or greater, and (c) other detergent ingredients and whereby the carbonate or bicarbonate and the percarbonate are dry mixed with the other ingredients."

Claim 1 according to the auxiliary request differed from claim 1 according to the main request insofar as component (b) consisted of sodium carbonate particles having a mean particle size of 250 µm or greater, wherein fewer than 20% of the carbonate particles had a particle size of below 250 µm and wherein fewer than 5% of said particles had a particle size below 150 µm.

Both requests contained dependent claims relating to specific embodiments of the composition of claim 1.

IV. The Opposition Division found in its decision inter alia that

- the claimed invention was sufficiently disclosed;

- the subject-matter of claim 1 according to the main request lacked novelty in the light of document (5);

- the subject-matter of the claims according to the auxiliary request was novel over the cited prior art;
there was no evidence that the selection of a sodium carbonate with the specific particle size distribution of claim 1 would bring about an increase of the storage stability of percarbonate;

on the contrary, the Opponents had provided experimental evidence that mixtures containing a sodium carbonate having a particle size distribution as in the patent in suit did not show any improvement of the storage stability of percarbonate over mixtures containing more finely divided particles;

since it was known from the prior art that dry-mixed carbonate or bicarbonate particles improved the stability of percarbonate and carbonate particles having the particle size distribution of the patent in suit were commercially available before the priority date of the patent in suit, it was obvious for the skilled person to try such commercial products for improving the stability of percarbonate;

the subject-matter of the first auxiliary request lacked thus an inventive step.

V. An appeal was filed against this decision by the Patent Proprietor (Appellant).

During the oral proceedings held before the Board on 6 July 2005, the Appellant filed three new sets of claims to be considered, respectively, as main and as first and second auxiliary requests.
Claim 1 according to the main request differs from claim 1 according to the main request before the first instance insofar as component (b) reads:

"particles of alkali metal carbonate or bicarbonate wherein the particles of the alkali metal carbonate or bicarbonate are particles of sodium carbonate or of sodium carbonate mixed with sodium bicarbonate and/or potassium carbonate, said particle having a mean particle size of 250 µm or greater",

and the claimed composition requires additionally that

"fewer than 20% of the carbonate or bicarbonate particles have a particle size of below 250 µm and fewer than 5% of said particles have a particle size below 150 µm".

Claim 1 according to the first auxiliary request differs from claim 1 according to the main request insofar as it does not contain any longer the requirement that the particles of the alkali metal carbonate or bicarbonate are particles of sodium carbonate or of sodium carbonate mixed with sodium bicarbonate and/or potassium carbonate.

Claim 1 according to the second auxiliary request differs from claim 1 according to the first auxiliary request insofar as claim 1 relates only to a laundry detergent composition and comprises surfactant in an amount of from 3 to 35% by weight of total composition, said surfactant being selected from anionic, cationic, non-ionic, ampholytic and zwitterionic surfactants and
mixtures thereof, and from 10 to 60% by weight of total composition of non-phosphate detergent builder compounds.

VI. The Appellant submitted in writing and orally inter alia that

- all the amended claims complied with the requirements of Article 123(2) EPC and, in particular, the wording of claim 1 according to the main request found support on paragraphs 0008 to 0010 of the description, corresponding to page 2, lines 31 to 42 of the published specification of the application as filed;

- the claimed invention was sufficiently disclosed and, in particular, the mean particle size of the carbonate or bicarbonate particles and their particle size distribution had to be measured on the mass of the particles exceeding a certain particle size as taught in the description of the patent in suit;

- the wording of claim 1 according to the main request was clear since component (b) related to mixtures of particles of the listed carbonate or bicarbonate components as well as to particles comprising mixtures of them;

- the claimed subject-matter was novel over the cited prior art;

- the Opponent's experimental data were not reliable;
the Appellant's own experimental evidence showed that the selection of carbonate particles having the particle size distribution of the patent in suit brought about a clear trend in increased percarbonate storage stability;

moreover, whilst the prior art suggested the use of finely divided carbonate having a great surface area for stabilising percarbonate, the patent in suit had found that percarbonate was better stabilised by selecting carbonate particles having a different range of surface areas;

the claimed subject-matter thus involved an inventive step.

VII. The Respondents (Opponents 01 and 02) submitted that

the wording of claim 1 according to the main request was not supported by the original disclosure of the patent in suit and it was not clear from the wording of the claim if component (b) related to separate particles of carbonate and bicarbonate or to mixed particles;

the claimed invention was not sufficiently disclosed since the patent in suit did not contain any teaching relating to the measurement of the particle size distribution of the carbonate or bicarbonate particles; in fact, the known methods of measurement of the particle size distribution were based upon the mass, the volume or the number of the particles exceeding a certain particle size and could give very different results; therefore,
it was not possible for the skilled person, in the absence of the information about the used method of measurement, to know how to reproduce the claimed invention;

- furthermore, according to the teaching of the description of the patent in suit about the method of measurement to be used for measuring the mean particle size of the carbonate particles, 50% or less by weight of these particles had a size of 250 µm or less; however, if the same method of measurement were used for measuring the particle size distribution, the wording of claim 1 would require that the amount of such particles having a size of 250 µm or less does not exceed 20% by weight; therefore, the mean particle size of such particles could never be of 250 µm as encompassed by the wording of claim 1 but had to be necessarily greater;

- the subject-matter of claim 1 lacked novelty in the light of example 3 of document (3);

- only one of the carbonate samples tested in the Appellant's experimental evidence complied with all the requirements of claim 1; this sample did not show, however, any improvement in percarbonate storage stability over the other tested products outside the scope of claim 1;

- moreover, the submitted experimental evidence did not contain any test with regard to the use of coated percarbonate or of bicarbonate particles;
since documents (1), (3) and (4) had already suggested to dry-mix percarbonate with carbonate having a mean particle size greater than 250 µm, having very small amounts, if at all, of very fine particles and having a particle size distribution similar to that of the patent in suit, the claimed subject-matter lacked an inventive step in the light of the teaching of the prior art.

VIII. The Appellant requests that the decision under appeal be set aside and that the patent be maintained on the basis of the main request filed during oral proceedings or alternatively on the basis of the first or the second auxiliary requests filed during oral proceedings.

The Respondents request that the appeal be dismissed.

Reasons for the Decision

1. **Main request**

1.1 **Sufficiency of disclosure**

1.1.1 Claim 1 according to the main request requires that the particles of alkali metal carbonate or bicarbonate have a mean particle size of 250 µm or greater, that fewer than 20% of the carbonate particles have a particle size of below 250 µm and fewer than 5% of said particles have a particle size below 150 µm.

The Respondents argued that the description of the patent in suit disclosed only how to measure the mean particle size of the carbonate or bicarbonate particles...
but not how to measure their particle size distribution. As regards the measurement of a particle size distribution different methods were known to the skilled person, which methods led to very different results. Such measurements could be based, for example, on the number of particles or on the mass or volume of the particles exceeding a certain particle size and the method based on the number of particles gave, for example, very different results from the other methods.

The Board notes that the patent in suit teaches that the mean particle size of the carbonate or bicarbonate particles is given by the diameter of sieve through which half of the mass of the sample will pass and accordingly through which half of the sample will not pass (see page 2, lines 45 to 46). Thus the mean particle size of such particles must be measured on the mass of the particles exceeding a certain particle size and not on the number of particles exceeding this size.

In the Board's view it would thus be illogical for the skilled person, aware of this teaching, to calculate the particle size distribution for such particles by a different method based, for example, on the number of the particles and giving very different, not comparable results.

The Board finds therefore that a skilled person, reading claim 1 and the description with a mind willing to understand would thus rule out such illogical interpretations and would understand that the same method of measurement has to be used (see e.g. T 190/99, point 2.4 of the reasons for the decision).
1.1.2 The Respondents argued further that, by using the definition of mean particle size given in the patent in suit and based on the mass of the particles exceeding a specific particle size, claim 1 required that 50% or less by weight of the carbonate or bicarbonate particles had a size of 250 \( \mu \text{m} \) or less; however, if the same method of measurement was used for measuring the particle size distribution, the wording of claim 1 would require that the amount of such particles having a size of 250 \( \mu \text{m} \) or less did not exceed 20% by weight; therefore, the mean particle size of such particles could never be of 250 \( \mu \text{m} \) as encompassed by the wording of claim 1.

The Board agrees with the Respondents' interpretation of the claim; however, the Board notes that it would be directly apparent to the skilled person, reading the claim with a mind willing to understand, that the broader range of mean particle size is restricted by the further requirements about particle size distribution and excludes from the scope of the claim a mean particle size of 250 \( \mu \text{m} \).

Therefore this apparent inconsistency in the wording of the claim does not hinder the skilled person to prepare a composition in accordance with claim 1 by following the teaching of the patent in suit.

1.1.3 The Board concludes that the claimed invention is sufficiently disclosed.

1.2 Clarity
1.2.1 Claim 1 requires that

- the particles of alkali metal carbonate or bicarbonate are particles of sodium carbonate or of sodium carbonate mixed with sodium bicarbonate and/or potassium carbonate,

- said particles have a mean particle size of greater than 250 µm (a mean particle size of 250 µm being excluded as explained above),

- fewer than 20% of the carbonate or bicarbonate particles have a particle size of below 250 µm and fewer than 5% of said particles have a particle size below 150 µm,

- the carbonate or bicarbonate and the percarbonate are dry mixed with the other ingredients.

Since the selection of the particles of alkali metal carbonate or bicarbonate as being particles of sodium carbonate or of sodium carbonate mixed with sodium bicarbonate and/or potassium carbonate was not part of the claims as granted, it must be also examined if this amendment complies with the requirements of Article 84 EPC.

1.2.2 The Board notes that the wording of claim 1 relates repetitively to two different classes of particles, alkali metal carbonate or bicarbonate, thus suggesting that these distinct classes of particles can be used alternatively.
On the other hand these particles of alkali metal carbonate or bicarbonate are selected from particles of sodium carbonate or sodium carbonate mixed with sodium bicarbonate and/or potassium carbonate.

Therefore all the selected particles, including those containing bicarbonate, contain an alkali metal carbonate.

If all selected particles are considered to belong to the class of the alkali metal carbonate particles, it is unclear if the claim still allows distinct particles of the listed alternative class of alkali metal bicarbonates which is repetitively mentioned in the wording of the claim.

If, on the other hand, the mixed particles of carbonate and bicarbonate are considered not to belong to any of the two classes listed, the wording of the claim would contradict itself.

1.2.3 The Appellant argued that carbonate and bicarbonate particles could be present as single particles or as mixed particles.

Paragraphs 0007, 0008 and 0010 of the description of the patent in suit teach that the claimed compositions can contain particles of carbonate or of bicarbonate, whilst paragraph 0009 teaches only which is the meaning to be given to the wording "alkali metal carbonate or bicarbonate" which includes single carbonate and bicarbonate species as well as mixtures of them with bicarbonate. This passage does not relate, however, to the particles made of such compounds and does not teach
that single particles of any of the listed chemical compound can be present by itself.

This paragraph thus is of no help in deciding which particles containing a mixture of carbonate and bicarbonate belong to the class of the carbonate particles and which one to the separate class of the bicarbonate particles.

Moreover, the description does not contain any teaching that the amount of the relative components in a particle could be used for deciding if a particle belongs to the class of carbonates or of bicarbonates.

It is thus not possible to assess with certainty, in the light of the wording of the claim and of the teaching of the description, which kind of particles falls within the scope of claim 1 and which not.

The Board concludes that claim 1 is not clear and does not comply with the requirements of Article 84 EPC.

The main request has thus to be dismissed on these grounds.

2. **First auxiliary request**

2.1 Articles 83, 84 and 123(2) EPC.

Claim 1 according to the first auxiliary request does not contain any longer the unclear wording discussed in point 1.2 above.
The Board is thus satisfied that this claim complies with the requirements of Article 84 EPC.

This has not been disputed by the parties.

The Board is also satisfied that Articles 83 and 123(2) EPC are complied with.

Since this request fails on other grounds, no more details are necessary.

2.2 Novelty

2.2.1 Document (5), considered in the decision under appeal (see point IV above), does not disclose carbonate particles having a particle size distribution wherein fewer than 5% by weight of said particles have a particle size below 150 µm (see table 2).

This has not been disputed by the parties.

Therefore, the claimed subject-matter is novel over the teaching of this document.

2.2.2 Document (3) does not disclose if fewer than 20% of the carbonate particles of the product of example 3 have a particle size of below 250 µm.

No evidence in this respect was submitted by the Respondents.

Therefore, this disclosure cannot be considered to detract from the novelty of the claimed subject-matter.
2.2.3 The Board is thus satisfied that the claimed subject-matter is novel over the cited prior art.

2.3 Inventive step

2.3.1 The patent in suit and, in particular, the subject-matter of claim 1, relates to bleaching compositions comprising alkali metal percarbonate and alkali metal carbonate or bicarbonate particles (page 2, lines 3 to 4).

As explained in the patent in suit percarbonate is an attractive perhydrate bleaching agent for use in bleaching compositions because it dissolves readily in water, provides a useful source of carbonate ions for detergency purposes and does not provide undesirable by-products. However, it is instable and decomposes rapidly when stored under moist and/or warm atmosphere (see paragraph 0002).

Bleaching compositions containing percarbonate usually contain sodium carbonate for neutralising acidity released when the composition is added to water which could inhibit the performance of the percarbonate; since carbonate absorbs humidity, it contributes initially to prevent the decomposition of percarbonate upon storage; however, carbonate also releases the absorbed humidity during storage in warm conditions thus finally reducing the stability of the percarbonate upon storage (see paragraphs 0004 and 0005).

The technical problem underlying the patent in suit is therefore defined in the description of the patent in suit as the provision of an alternative carbonate
source which brings about an improvement of the stability of the percarbonate upon storage whilst maintaining the fast release of alkalinity in cold water necessary for good product performance (paragraph 0008).

2.3.2 The most suitable starting point to be selected for assessing inventive step of a claimed subject-matter is, according to the jurisprudence of the Boards of Appeal of the EPO, not a subject-matter (in the present case a composition) having the most possible number of features in common with the claimed one but a technically realistic starting point, contained in a document dealing with the same technical problem as the claimed invention, from which the claimed invention could most easily have been made by a skilled person at the filing date of the patent in suit (see e.g. T 298/93, point 2.2.2 of the reasoned decision and T 506/95, point 4.1 of the reasoned decision, neither published in the OJ EPO).

The decision under appeal (page 11, fourth full paragraph) and the Appellant identified document (8) as the most suitable starting point for the evaluation of inventive step whilst the Respondents selected for this purpose documents (1) or (3).

Document (1), relating to percarbonate bleach compositions exhibiting relatively long term stability which may comprise surfactants and other components of laundry detergent compositions (column 1, lines 13 to 17 and column 4, line 51 to column 4, line 9), teaches that a composition of sodium percarbonate and soda ash made by mixing the two components together has a
relatively low storage stability and exhibits a reduction in available oxygen content with time of storage which is undesirable high and seeks a solution to this technical problem which is the same dealt with in the patent in suit and discloses commercially available products containing this kind of composition (column 1, line 53 to column 2, line 2; example 4, column 8, lines 24 to 26 and column 8, lines 63 to 65; table on top of column 9).

Document (3) deals with the problem of instability upon storage of mixtures of an inorganic bleaching agent which can release hydrogen peroxide in aqueous solutions, such as sodium percarbonate or perborate, and a bleach activator (see column 1, lines 9 to 39). This document, even suggesting the use of carbonates or bicarbonates for solving the technical problem above does not deal with the specific problem addressed in the patent in suit of the instability of percarbonate upon storage arising from the dry mixing of carbonate and percarbonate.

Document (8) deals with the problem of the stability upon storage of percarbonate containing laundry detergent compositions because of the presence of heavy metals and moisture (see page 2, first paragraph) and, though exemplifying compositions comprising dry mixed carbonate, does not deal with the specific problem addressed in the patent in suit of the instability of percarbonate upon storage arising from the dry mixing of carbonate and percarbonate.
The Board thus takes a detergent composition comprising the known commercially available products disclosed in document (1), which is the document dealing exactly with the same technical problem addressed in the patent in suit, as the most technically realistic and suitable starting point for the evaluation of inventive step of the claimed subject-matter.

This type of products was also acknowledged in the patent in suit to belong to the prior art and represents in fact also according to the patent in suit the starting point for the claimed invention (see paragraph 0004).

Considering the particle size distribution of the commercial product of example 5 of document (1) given in the table on the top of column 9, the Respondents' calculations presented as document (1A) and the metric values corresponding to the U.S. sieve numbers as reported in table 1 of document (17), this commercial product results to contain sodium carbonate particles having a mean particle size of 270 µm and a very minor amount of particles of 150 µm or less and thus to differ from the products according to claim 1 of the patent in suit only insofar as they do not disclose the precise amount of particle size distribution below 250 µm.

2.3.3 According to the first instance decision the Respondents had provided convincing experimental evidence that mixtures containing a sodium carbonate having a particle size distribution entirely between 350 and 500 µm, i.e. a distribution according to claim 1 of the patent in suit, did not show any improvement of the storage stability of coated or uncoated
percarbonate over mixtures containing more finely
divided particles having a particle size distribution
between 180 and 420 µm, which thus did not contain
particles below 150 µm.

The Board finds that the Respondents' experiments were
carried out correctly and that at least the first
series of tests carried out in sealed jars (Experiment
A) had to be considered as realistically reproducing
conditions occurring upon storage of the type of
product claimed in the patent in suit. Moreover, the
type of composition tested, comprising a surfactant and
a bleach activator had to be considered to represent a
laundry detergent composition. In fact, even in absence
of additional components which may be present (but not
have to) in a conventional laundry detergent
composition, e.g. antiredeposition agents, fluorescers,
chelating agents etc., the tested composition has to be
considered as one falling within the scope of claim 1
of the patent in suit.

The burden of proof lied thus on the Appellant to show
that the distinguishing features of the claimed
subject-matter brought about the alleged improvement of
percarbonate stability.

In the light of the experimental evidence submitted by
the Appellant with the statement of the grounds of
appeal, the Board finds credible that a product as
claimed is more stable than a product having a smaller
particle size (a particle size of 150 µm according to
the Appellant's information filed under cover of the
letter dated 17 December 2003) and that therefore
particles of very small size should be avoided.
However, the tested samples do not correspond to those tested by the Respondents and to the commercial product of document (1) which had a greater mean particle size and practically no particles or a very minor amount of particles below 150 µm. Therefore, the Appellant's experimental evidence does not show that the distinguishing features of the claimed subject-matter bring about any improvement of the percarbonate stability over the prior art and cannot be taken as evidence that the Respondents' experimental data are not credible.

Moreover, the Appellant's allegation that the patent in suit had found that percarbonate was better stabilised by selecting carbonate particles having a specific range of surface area remains unsupported, since neither claim 1 contains any limiting feature as to the surface area of the carbonate nor convincing evidence was submitted that the tested products had a selected range of surface area.

The Board concludes that the technical problem underlying the claimed invention, seen in the light of the teaching of document (1), can thus be only seen as the provision of an alternative product comprising a dry mixture of percarbonate and carbonate having similar or better percarbonate stability upon storage than the known commercially available products.

The Board is convinced that this technical problem has been solved by means of the claimed subject-matter.
2.3.4 The Board agrees that document (1) taught a method for preparing mixed particles of carbonate and percarbonate which were more stable upon storage than dry mixed commercially available products (see column 2, lines 21 to 39, 56 to 66 and examples 3 to 5) and thus that the teaching of this document would lead away from the subject-matter of claim 1 of the patent in suit.

However, document (3) disclosed products containing a mixture of alkali metal carbonate and percarbonate which could be used in laundry detergent products and were very stable upon storage (column 2, lines 1 to 16 and 45 to 50; example 3 on column 4). Such products contained only particles having a particle size between 42 to 80 mesh, i.e. 180 and about 400 µm (see example 3, column 4, lines 29 to 32 read in combination with column 3, lines 22 to 24).

Moreover, document (4) taught that the stability upon storage of percarbonate could be improved by dry-mixing with it other particulate detergent components, such as a spray-dried detergent base or any other particulate detergent component, e.g. builder components such as carbonate, having a mean particle size above 250 µm (see page 1, lines 59 to 77; page 2, lines 29 to 44 read in combination with lines 61 to 63, page 3, lines 25 to 30).

The prior art contained thus in the Board's view a clear teaching to increase the mean particle size of carbonate and not to use carbonate having very fine particles below 180 µm in combination with percarbonate in order to increase the stability upon storage.
The Appellant's arguments that the prior art suggested the use of finely divided carbonate, i.e. of very fine particles of carbonate having a great surface area for stabilising percarbonate is thus, in the Board's judgement, contrary to the teaching of the prior art and cannot have any bearing on the evaluation of inventive step.

Moreover, even if in the prior art no carbonate products with the particle size distribution required in the patent in suit would have been commercially available, the step of manufacturing such a carbonate having a particle size distribution which the skilled person would have expected to bring about technical advantages already known from the prior art, as explained hereinabove, amounted to a simple sieve operation well known to the skilled person at the priority date of the patent in suit.

Therefore, the Board concludes, that in the light of the teaching of the prior art, it was obvious for the skilled person to try a carbonate having the particle size distribution of claim 1 in order to provide alternative products having similar or better stability upon storage than the known commercially available products.

The subject-matter of claim 1 lacks thus an inventive step.

The first auxiliary request has thus to be dismissed.
3. Second auxiliary request

3.1 Claim 1 according to the second auxiliary request differs from claim 1 of the first auxiliary request insofar as claim 1 relates only to a laundry detergent composition and comprises surfactant in an amount of from 3 to 35% by weight of total composition, said surfactant being selected from anionic, cationic, non-ionic, ampholytic and zwitterionic surfactants and mixtures thereof, and from 10 to 60% by weight of total composition of non-phosphate detergent builder compounds.

3.2 Since according to documents (1), (3) and (4) it was obvious to combine the mixture of percarbonate and carbonate with other conventional detergent products (see document (1), column 4, lines 51 to 56, (3), column 2, lines 45 to 50 and (4), page 2, lines 29 to 69) and the additional features of claim 1 do not bring any further contribution to the stability of the percarbonate, the arguments put forward above apply mutatis mutandis to the claims of the second auxiliary request.

The subject-matter of claim 1 according to the second auxiliary request lacks thus an inventive step.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Rauh P. Krasa