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DECISION
of 15 June 2000

Case Number: T 0065/97 - 3.2.4
Application Number: 90311012.0
Publication Number: 0424001
IPC: A01K 1/015

Language of the proceedings: EN

Title of invention:
Animal dross absorbent and method

Patentee:
AMCOL INTERNATIONAL CORPORATION

Opponent:
(01) SÜD-CHEMIE AG
(02) Steetley Bentonite & Absorbents Limited
(03) Laporte Industries Limited
(04) IKO Erbslöh Industriemineralien und Kohlenstoffe GmbH
     & Co. KG
(05) Skamol A/S
(06) TOLSA, S.A.
(08) Bentonite Corporation
(09) Sivomatic BV

Headword:

Relevant legal provisions:
EPC Art. 123(2), 54(3)(4)

Keyword:
"Extension of subject-matter - all requests - yes"
"Novelty - all requests - no"

Decisions cited:
T 0123/85, T 0752/93

Catchword:
Case Number: T 0065/97 - 3.2.4

DECISION
of the Technical Board of Appeal 3.2.4
of 15 June 2000

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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 29 November 1996
revoking European patent No. 0 424 001 pursuant
to Article 102(1) EPC.

Composition of the Board:
Chairman: C. A. J. Andries
Members: M. G. Hatherly
R. E. Teschemacher
Summary of Facts and Submissions

I. European patent No. 0 424 001, filed on 8 October 1990 and claiming priority from the patent applications US 423193 of 18 October 1989 and US 552823 of 16 July 1990, was revoked by the opposition division's decision dispatched on 29 November 1996.

On 14 January 1997 the proprietor filed an appeal against this decision and paid the appeal fee, filing the statement of grounds on 26 March 1997.

II. The following documents played a role in the appeal proceedings:


III. During the proceedings the appellant filed a main request and seven auxiliary requests. The claims 1 of the eight requests read:

"A litter box comprising a water-impermeable receptacle having disposed therein an absorbent composition capable of agglomerating upon wetting into a mass of sufficient size and of sufficient cohesive strength for physical removal of the agglomerated mass from the litter box without substantial adherence to an animal, said absorbent composition comprising non-compacted particles of a water-swellable bentonite clay in an amount of at least 65% by weight of the composition, less than 10% by weight of the water-swellable bentonite clay having a particle size
Main and 4th Auxiliary Request | 1st and 5th Auxiliary Requests | 2nd and 6th Auxiliary Requests | 3rd and 7th Auxiliary Requests
---|---|---|---
appreciably greater than 3350 µ; | greater than 3350 µ; | appreciably greater than about 3350 µ; | greater than about 3350 µ;

and less than 10% by weight of the water-swellable bentonite clay having a particle size

Main and 4th Auxiliary Request | 1st and 5th Auxiliary Requests | 2nd and 6th Auxiliary Requests | 3rd and 7th Auxiliary Requests
---|---|---|---
appreciably less than 50 µ; | less than 50 µ; | appreciably less than about 50 µ; | less than about 50 µ;

said water-swellable bentonite clay being sodium bentonite.

Main and 1st, 2nd and 3rd Auxiliary Requests add the following wording at the end of the claim:

but not including a composition in which all the water-swellable clay has a particle size in the range of 50 to 3350 µ.

IV. Oral proceedings took place on 15 June 2000 in the presence of all parties except the party as of right (opponent 3) who, after being duly summoned, in his letter of 12 June 2000 withdrew his opposition and announced that he would not attend the oral proceedings. In accordance with Rule 71(2) EPC the proceedings were continued without him.

V. During the appeal proceedings the respondents (opponents) argued against the patent under Articles 84 and 100(a), (b) and (c) EPC.
Respondent 01 (opponent 01) also objected to the filing of the appellant's fourth to seventh auxiliary requests shortly before the oral proceedings and because the appellant was thereby removing a feature of claim 1 of his main request before the opposition division.

The appellant countered the respondents' arguments.

VI. The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of claim 1 according to one of the following requests:

- main request and auxiliary requests 1 to 3 as indicated in the decision under appeal,

- auxiliary requests 4 to 7 as submitted with the letter dated 15 May 2000.

The respondents requested that the appeal be dismissed.

Reasons for the decision

1. The appeal is admissible.

2. Admissibility of the fourth to seventh auxiliary requests

While claim 1 of each of these requests is broader in scope than claim 1 of the main request before the opposition division, this is due to the removal of the disclaimer which disclaimer was called into question in the board's communication of 21 March 2000.
These requests were filed in the letter of 15 May 2000 (i.e. one month before the oral proceedings) in response to said communication of the board. Contrary to the opinion of respondent 01, the appellant was not prevented from filing an independent claim which was broader than the independent claim forming the basis for the decision under appeal. Whereas during opposition proceedings the broadening of the claims as granted is excluded under Article 123(3) EPC, there is no corresponding principle restricting an appellant to the claims submitted in the first instance. The simple limitation of a claim without further explanation is not to be considered as an irrevocable surrender of a part of the patent (T 123/85, OJ EPO 1989, 336). Rather the proprietor is entitled to make amendments in order to remedy any deficiencies which may affect the validity of the patent (T 752/93, cited in Case Law of the Boards of Appeal of the EPO, 3rd Edition 1998, VI.I.3.1.2(b)(bb)(3), p. 325 of the English version).

The requests are therefore admitted by the board.

3. Article 123(2) EPC - claim 1 of the main request

3.1 It is stated in lines 5 to 9 of page 6 of the application as originally filed (lines 27 to 30 of page 3 of the patent specification) that "To achieve the full advantage of the present invention, the water-swellable clay ... should have a particle size within the range of about 50 microns to about 3350 microns".

Further, according to lines 1 to 13 of page 7 of the application as originally filed (page 3, lines 43 to 49 of the patent specification), "non-compacted water-swellable bentonite clays having a particle size in the range of about 50 microns to about 3350 microns" have the properties set out in claim 1 of the main request.
Similar information concerning the range of about 50 microns to about 3350 microns is to be found throughout the description.

Thus the skilled person reading the application and patent specification would conclude that the best clay for the invention is a clay having particles in this range, indeed a clay whose particles all lie in this range.

3.2 Nevertheless, claim 1 of the main request includes the feature of "less than 10% by weight of the water-swellable bentonite clay having a particle size appreciably greater than 3350 μ, and less than 10% by weight of the water-swellable bentonite clay having a particle size appreciably less than 50 μ".

3.3 The appellant argues that it is derivable from lines 1 to 7 of page 18 of the originally filed description (lines 29 to 32 of page 6 of the patent specification as granted) that less than 10% by weight of water-swellable bentonite particles appreciably greater than about 3350 μ in diameter can be accepted.

The range in the claim ends at (exactly) "3350 μ" whereas the "less than 10%" in the description is given as applying to "about 3350 μ". However any difference between "3350 μ" and "about 3350 μ" plays no role in the arguments of this section 3 and the word "about" will be ignored for the rest of section 3.

It follows from the description that if there are 10% of what will be termed "oversize" particles, then cohesion will be unacceptable. This implies that more than 90% of particles within the range are necessary to produce an acceptable product.
Similarly the appellant argues it is derivable from
lines 7 to 14 of page 18 of the originally filed
description (lines 32 to 36 of page 6 of the patent
specification as granted) that less than 10% by weight
of water-swellable bentonite particles appreciably
smaller than about 50 μ in diameter can be accepted. If
there are 10% of "undersize" particles then once again
cohesion will be unacceptable, once again implying that
more than 90% of particles within the range are
necessary to produce an acceptable product.

3.4 The board sees no indication in the originally filed
application that just less than 10% of "undersize"
particles and just less than 10% of "oversize"
particles can be accepted. This would mean that the
percentage of particles within the range could drop to
just over 80. This would not seem to be compatible with
the implication twice in the originally filed
description that just over 90% of particles in the
range are necessary.

The appellant argued in the oral proceedings that the
cohesion problem if the percentage of "undersize"
particles was too high was different from the cohesion
problem if the percentage of "oversize" particles was
too high. However the board cannot see this from the
originally filed application, and indeed sees no hint
therein that percentages up to just below 10 could be
accepted outside both ends of the range.

The feature cited in the above section 3.2 thus
contravenes Article 123(2) EPC so that claim 1 of the
main request is unallowable and the main request as a
whole must be refused.
4. **Article 123(2) EPC - claim 1 of the auxiliary requests**

The feature cited in the above section 3.2, worded in slightly different ways as far as the words "appreciably" and "about" are concerned, appears in claim 1 of each auxiliary request. The words "appreciably" and "about" do not alter the arguments set out in the above section 3, with the result that also claim 1 of each auxiliary request contravenes Article 123(2) EPC.

Accordingly claim 1 of each auxiliary request is unallowable and all the auxiliary requests must be refused.

5. An appeal whose requests are all found unallowable for one reason might well be dismissed without further comment. However the parties in the present appeal wish the board to comment on some other aspects and the board considers it appropriate to do so.

6. **D1 - claim 1 of the main request and the first to third auxiliary requests**

6.1 The main request

6.1.1 Except for two features, namely the lack of "substantial adherence to an animal" and that the clay particles are "non-compacted", D1 explicitly discloses the subject-matter of claim 1 of the main request up to and including the wording "said water-swellable bentonite clay being sodium bentonite."

A writer describing a process normally lists only those steps that are carried out and does not mention what is not done in the process. Thus, bearing in mind the otherwise detailed explanation in D1, the lack of...
information in D1 as to whether the clay is compacted or non-compacted points to it being non-compacted. It was specifically accepted by the appellant during the oral proceedings that the sodium bentonite clay referred to in D1 is non-compacted.

The lack of adherence to an animal is achieved by the specific formulation of the composition and if this effect is achieved by the composition of claim 1 of the main request then it is also achieved by the composition of D1.

6.1.2 The European patent application D1 was filed on 11 January 1990 and published on 18 July 1990. As far as the features which are relevant for claim 1 of the main request are concerned, D1 is entitled to the earlier of its two priority dates, i.e. 13 January 1989 from the US patent application 297471.

The European patent application for the present patent was filed on 8 October 1990 and its earliest claimed priority date is 18 October 1989.

Thus, for the designated contracting states common to D1 and the present patent, D1 forms part of the state of the art under Article 54(3)(4) EPC.

6.1.3 The appellant specifically accepted during the oral proceedings that the subject-matter of claim 1 of the main request up to and including the wording "said water-swellable bentonite clay being sodium bentonite" and including the non-compacted state of the particles, was known from D1 and that this was part of the state of the art under Article 54(3)(4) EPC.

6.1.4 The appellant argues that the difference of the present invention over the disclosure of D1 is provided by the disclaimer at the end of claim 1 of the main request.
reading "but not including a composition in which all the water-swellable clay has a particle size in the range of 50 to 3350 μ", this disclaimer ensuring that some particles of the composition of the present invention lay outside the range of 50 μ to 3350 μ, either below the lower end or above the upper end, or both below and above.

6.1.5 The appellant introduced this disclaimer to exclude the disclosure of D1 (which is part of the state of the art under Article 54(3)(4) EPC), in order, he argues, to make the claimed subject-matter novel.

6.1.6 It is noted that the disclaimer is not allowable for a first reason that it does not disclaim all of what is disclosed by D1. Claim 5 of D1 states that "the water-swellable bentonite clay has a particle size ranging from about 50 microns to about 3350 microns." Thus the disclaimer should disclaim all the clay particles being in "the range of about 50 μ to about 3350 μ".

The appellant agreed in the oral proceedings to adapt claim 1 of the main request and of the first, second and third auxiliary requests accordingly if the board deemed it necessary. It will be seen below however that the allowability of these requests does not depend only on this point.

6.1.7 The appellant argues it is derivable from lines 1 to 7 of page 18 of the description of the originally filed patent application (lines 29 to 32 of page 6 of the patent specification as granted) that less than 10% by weight of water-swellable bentonite particles appreciably greater than about 3350 μ in diameter can be accepted.
Lines 18 to 24 of column 10 of D1 however read almost exactly the same as lines 1 to 7 of page 18 of the present originally filed application. Both specify "a significant percentage" of "oversize" particles and the only addition in the present application is the example "e.g. 10% by weight or more".

Thus, if it can be agreed that the present application discloses that the inventive composition can have a significant percentage of "oversize" particles (i.e. up to 10% which means all values between 0% and just less than 10%), then it must be agreed that D1 also discloses a composition which can have a significant percentage of "oversize" particles (i.e. all values between 0% and whatever "a significant percentage" means in D1).

6.1.8 The appellant argues that the teaching of the present patent over the teaching of D1 is the presence of specific amounts of tails of "undersize" and "oversize" particles, the specific amounts being "less than 10% by weight". While the present patent presents a new piece of information, namely that a significant percentage of "undersize" and "oversize" particles means 10%, claim 1 of the main request is not limited to this new piece of information but covers all amounts up to just less than 10%. At least some of these claimed amounts are implicitly disclosed by D1.

Thus D1 discloses a water-swellable bentonite clay which has some particles (but less than 10% by weight) greater than 3350 µ. This composition with some "oversize" particles of course cannot have all its particles lying in the range of 50 to 3350 µ. Whether or not this D1 composition also has particles smaller than 50 µ, it falls within the scope of claim 1 of the...
main request which merely specifies "less than 10%" of such "undersize" particles which includes no "undersize" particles at all.

6.1.9 Thus the disclaimer (see the above sections 6.1.4 and 6.1.5) does not exactly define the range which is common to both D1 and the present patent, so that it fails to make the subject-matter of claim 1 of the main request novel with respect to D1 and so is unallowable. The main request must therefore fail for this reason also.

6.2 The presence or absence of the words "appreciably" and "about" in claim 1 of the first to third auxiliary requests does not alter the arguments set out in the above sections 6.1.7 to 6.1.9 which arguments also cause these auxiliary requests to fail.

7. Claim 1 of the fourth to seventh auxiliary requests

7.1 For the reasons given in sections 6.1.1 to 6.1.5 and 6.2 above (see especially section 6.1.3), the subject-matter of claim 1 of each of the fourth to the seventh auxiliary requests is not novel, so that, not only for the reasons given in the above sections 3 and 4, these requests must fail.

7.2 During the oral proceedings the appellant admitted that the subject-matter of these claims 1 of the fourth to the seventh auxiliary requests was not novel but nevertheless requested - for fairness and to keep the case alive - that they be remitted to the first instance for further prosecution as envisaged in the board's communication of 21 March 2000 stating that the board did not intend to discuss novelty insofar as it was not relevant for the assessment of the allowability of the disclaimer.
However the discussion even of the disclaimer settled the novelty issue for these claims with respect to D1 and indeed the appellant accepted that these claims were not novel. Therefore no further discussion of novelty was necessary before the board or would be necessary before the first instance. As the appellant chose to file claims knowing that they had no novel subject-matter (and even did not indicate how he might propose to provide novelty), he should not be surprised that the board will not remit them to the first instance for further consideration.

8. Articles 57 and 83 (100(b)) EPC

The respondents presented no extra arguments concerning objections under these Articles during the appeal proceedings. The board supports the opinions expressed in sections 5.1 and 5.2 of the opposition division's decision.

9. The words "appreciably" and "about" used in claim 1 of various requests

9.1 As is clear from the dictionaries cited by the parties, the word "appreciably" has various meanings, including

- fairly large, considerable, and

- capable of being perceived or measured.

9.1.1 A commercial, economical sieving process produces clay particles which will not all lie between the sizes implied by the largest and smallest mesh sieves used. There will be particles spread inside, at, and outside these desired sizes, the word "spread" being used because there will not be any size around the desired sizes which has no particles.
If, in this technical context, the word "appreciably" is to be given the first meaning cited in section 9.1 above, then a limit is set at 50 μ and another limit is set somewhat below 50 μ (and also at 3350 μ and somewhat above 3350 μ). The respondents have argued that difficulties in understanding the claims 1 arise when using this approach. For example the sizes and amounts set out in claim 1 of the main request would be satisfied if all the particles had sizes between 50 μ and somewhat below 50 μ and/or between 3350 μ and somewhat above 3350 μ.

However each claim 1 would not cover compositions which do not satisfy the functional requirements set out in the claim and whatever compositions are produced will in practical terms need to be ones that can be produced in industrial processes at reasonable cost, not ones created for test purposes in the laboratory by scrupulous sieving and mixing.

A commercial process for preparing a commercial composition will finish by using a small mesh sieve and a large mesh sieve. The small mesh sieve will ensure that most particles of the composition will be above the nominal size implied by the mesh size of the sieve. However there will be no sharp cut off in the amount of particle below this mesh size but a gradual falling off as the particle size decreases. There will thus not be two limits at the 50 μ end of the range but only one, namely the nominal size.

9.1.2 Thus "appreciably" in claim 1 of various requests needs to be interpreted in a way that is technically meaningful. The board concludes that, in the context of the patent, the meaning of "capable of being perceived or measured" is the only appropriate meaning.
9.1.3 Even if, bearing in mind the context of the patent, "appreciably" were held to be ambiguous and meaning either "fairly large or considerable" or "capable of being perceived or measured", then giving it the latter meaning would result in the narrower scope. Thus the appellant would not gain any advantage from the ambiguity.

9.2 Speaking generally, whether the word "about" can be applied to a claimed range depends on whether it is sufficiently clear in the context of the patent read as a whole and whether its presence still permits the claimed invention to be distinguished from the prior art with respect to novelty and inventive step.

Since, the subject-matter claimed in claim 1 of these requests is not new, discussion of the word "about" is superfluous.

10. Affidavit of Antonio Álvarez Berenguer

This affidavit states that compositions having between 62% and 67% of particles between 50 \( \mu \) or 600 \( \mu \) and 3350 \( \mu \) were tested.

The board considers that no useful conclusions can be drawn from these tests for the present invention since in the latter at least 80% of particles between 50 \( \mu \) and 3350 \( \mu \) must be present.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

G. Magouliotis

The Chairman:

C. Andries