Internal distribution code:

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

Datasheet for the decision of 9 December 2016

Case Number: T 1436/14 - 3.2.04

Application Number: 04027693.3

Publication Number: 1614345

IPC: A01K1/015, B01J20/32, B01J20/12

Language of the proceedings: EN

Title of invention:
Coated clumping litter

Applicant:
Nestec S.A.

Headword:

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
Main request - novelty (no)
Auxiliary request I - inventive step (no)

Decisions cited:

Catchword:

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 1436/14 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 9 December 2016

Appellant: (Applicant)	Nestec S.A. P.O. Box 353 1800 Vevey (CH)
Representative:	Rupp, Christian Mitscherlich PartmbB Patent- und Rechtsanwälte Sonnenstraße 33 80331 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 31 January 2014 refusing European patent application No. 04027693.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	A. de Vries
Members:	E. Frank
	C. Heath

Summary of Facts and Submissions

I. On 28 March 2014 the appellant (applicant) lodged an appeal against the examining division's decision dated 31 January 2014 refusing the European patent application No. 04027693.3 and paid the prescribed fee at the same time. The statement of grounds of appeal was received on 10 June 2014.

II. The examining division held that the subject-matter of claim 1 of the main and first to third auxiliary requests, all filed on 10 January 2014, lacked an inventive step in the light of

D1: US 2003/0148100 A1 and

D2: US 2004/0079293 A1.

III. A communication pursuant to Article 15(1) RPBA was issued after a summons to attend oral proceedings. The appellant subsequently filed a new main and auxiliary request I with letter of 22 November 2016. The oral proceedings were duly held on 9 December 2016.

IV. The appellant requests that the decision under appeal be set aside and that a patent be granted based on the main request, or auxiliary request I, both filed with letter dated 22 November 2016.

V. The independent claim 1 reads as follows:

Main request

"An animal litter comprising:

non-swelling particles (12) having a size range of -10 to +50 mesh, said non-swelling (12) particles being a [*sic*] agglomeration of particulate fines (36) selected from the group consisting of clay, quartz,

feldspar, calcium bentonite, calcite, illite, calcium carbonate, carbon, mica, Georgia white clay, hectorite, zeolite, smectite, opal, kaolinite, pumice, tobermite, slate, gypsum, vermiculite, halloysite, sepiolite, marls, diamomaceous earth, dolomite, attapulgite, montmorillonite, Monterey shale, Fuller's earth, silica, fossilized plant materials, perlites, expanded perlites, and mixtures thereof; and
a swelling agent (14) having a size range of 60 mesh to 300 mesh coated on said non-swelling particles (12), said swelling agent (14) is selected from the group consisting of sodium bentonite and a blend of sodium bentonite and guar gum,

wherein the animal litter is obtainable by:
- contacting the swelling agent (14) and the non-swelling particles (12),
- swelling or gelatinizing the swelling agent (14) by moisture of the non-swelling particles (12) and adhering the swelling agent (14) to the non-swelling particle (12) in order to produce a coated product (52), and
- drying the coated product (52)."

Auxiliary request I

"A method for producing an animal litter comprising: non-swelling particles (12) having a size range of -10 to +50 mesh, said non-swelling (12) particles being an agglomeration of particulate fines (36) selected from the group consisting of clay, quartz, feldspar, calcium bentonite, calcite, illite, calcium carbonate, carbon, mica, Georgia white clay, hectorite, zeolite, smectite, opal, kaolinite, pumice, tobermite, slate, gypsum, vermiculite, halloysite, sepiolite, marls, diamomaceous earth, dolomite, attapulgite, montmorillonite, Monterey shale, Fuller's earth, silica, fossilized plant

materials, perlites, expanded perlites, and mixtures thereof; and
a swelling agent (14) having a size range of 60 mesh to 300 mesh coated on said non-swelling particles (12), said swelling agent (14) is selected from the group consisting of sodium bentonite and a blend of sodium bentonite and guar gum,
the method comprising the steps of:
- contacting the swelling agent (14) being a powder with a moisture content of less than 20%, and the non-swelling particles (12) having a moisture content from 20% to 40%,
- swelling or gelatinizing the swelling agent (14) by moisture of the non-swelling particles (12) and adhering the swelling agent (14) to the non-swelling particle (12) in order to produce a coated product (52), and
- drying the coated product (52)."

VI. The appellant argued as follows:

Main request

The contacting step at the product-by-process clause of claim 1 (cf. also original application on page 9) results in a different structure of the obtainable product, since the particles are initially swollen and then dried. This is contrary to D1, where no such discrete coating takes place. Therefore, claim 1 of the main request is novel over D1.

Auxiliary request I

In method claim 1 of the first auxiliary request, "swelling or gelatinizing" affects adhesion between core and coating. Moreover, the moisture content of the

swelling agent to produce the coating is also decisive for achieving adhering. In doing so, the animal litter provides superior clumping properties. This is neither disclosed nor hinted at in D1. On the contrary, D1 suggests, cf. paragraph 0013, that the powder coatings may be "augmented" with other agents. These agents could also serve to adhere the coating powder to the core. Therefore, D1 and common general knowledge could not have led the skilled person to the alternative method claimed by claim 1 of the first auxiliary request, if he had to carry out the teaching of D1. Thus, claim 1 of auxiliary request I is inventive in the light of D1 and common general knowledge of the skilled person.

Reasons for the Decision

1. The appeal is admissible.

2. Main request

2.1 Document D1 discloses an animal litter comprising non-swelling particles and a swelling agent coated on the non-swelling particles, cf. paragraph 0004. The size ranges and materials used in D1's litter composition correspond to or fall within the ranges of those of product claim 1 of the main request, cf. D1, paragraphs 0005, 0008, 0012 and 0014 (clay or calcium montmorillonite fines of -10 to +50 mesh as non-swelling particles coated with bentonite powder of about 200 mesh size as swelling agent). In particular, non-swelling particles which are an agglomeration of clay fines, and a swelling agent, to form the coating which includes at least one of a sodium bentonite powder and a bentonite guar gum blended powder, are

explicitly described, cf. D1, paragraph 0013, lines 1-6.

2.2 Moreover, the Board notes that product claim 1 of the main request is concerned with the process by which the swelling agent is adhered to the non-swelling particles in order to obtain the coated product. In this regard, the end clause of claim 1 has been formulated as a product-by-process claim: "is obtainable by ...". Thus, as regards novelty of claim 1, the question has to be answered whether the product under consideration is different to known products, in particular in relation to clumping, and if so how this difference is reflected in the properties of the claimed product. It is common ground, see point 2.1 above, that otherwise the subject-matter of claim 1 is known from D1.

2.3 The burden of proof for an allegedly distinguishing "product-by-process" feature lies with the appellant who should provide evidence as to what limitations are implied by the three final process steps in claim 1. The appellant refers to the original description on page 9, lines 23-25, and argues that the "contacting step" in claim 1 would result in a different structure of the product obtained: since the particles are first made to swell and then dried, a bigger particle size and more complete coating would be achieved. However, there is no indication or suggestion in the application that the particles might be bigger or coated more completely. Nor can the Board infer such properties from the other factors and features described in the application that largely correspond to or are identical to those given in D1 (see below). Most importantly, the appellant has not provided any evidence, for example in

the form of comparative tests in support of the alleged structural differences.

2.4 Rather, the only evidence regarding the material properties obtained is the tabled data in the application's figure 2 (clumping analysis) and 3 (screen analysis, bulk density, moisture content). Since this data is *identical* to that in the tables of figures 2 and 3 of D1, the Board cannot but conclude that the examples in D1 have exactly the same properties as the claimed product of claim 1 of the main request.

Therefore, document D1 deprives the subject-matter of claim 1 of novelty and consequently the main request cannot be allowed.

3. Auxiliary request I

3.1 The Board firstly notes that the method for producing an animal litter according to claim 1 of the first auxiliary request requires selection from the same group of materials for the non-swelling particles, now in the form of an agglomeration of particulate fines, as claim 1 of the main request. The swelling agent is now limited to sodium bentonite with or without guar gum. D1 discloses agglomerated clay and montmorillonite fines for the non-swelling particles, as well as sodium bentonite with or without guar gum, as swelling agent, cf. paragraphs 0013 and 0014. Respective sizes are as in claim 1 of the main request and correspond to those disclosed in D1, cf. point 2.1 above.

3.2 Moreover, method claim 1 requires the following three final steps for manufacture:

- contacting the swelling agent being a powder with a moisture content of less than 20%, and the non-swelling particles having a moisture content from 20% to 40%,
- swelling or gelatinizing the swelling agent by moisture of the non-swelling particles and adhering the swelling agent to the non-swelling particle in order to produce a coated product, and
- drying the coated product.

At this juncture the Board adds that the swelling by (absorbing) moisture of the non-swelling particles is a direct consequence of their moisture content being higher than that of the relatively dry swelling agent. Any coating material which corresponds to a material selected from the group consisting of sodium bentonite and a blend of sodium bentonite and guar gum must inherently "swell" or "gelatinize" when moisture is present, thus forming a "swelling agent" within the meaning of method claim 1 of the first auxiliary request. This is particularly so when guar gum is added, as it is generally known to effectively enhance the swelling power and ease of gelatinization.

3.3 In D1, paragraphs 0014, 0016 and 0017, the composite particles of the litter are produced by coating the non-swelling agglomerate fines with the swelling agent. The coating is effected in a centrifugal coater or a rotary coater/dryer and necessarily involves contacting the two materials with the non-swelling particles and adhering the swelling agent on the fine particles so as to form the coating. The resultant particles are subsequently dried.

The non-swelling particles have a moisture content from 20% to 40% paragraph 0014, or, more specifically 28%, paragraph 0015. Contrary to the appellant's view, the

skilled person would readily glean from paragraph 0013, last two lines, that the exemplary coating powder which includes at least one of a sodium bentonite powder and a bentonite/guar gum blended powder may also be used as coating in context with the manufacturing process described under subsequent paragraph 0014 (or 0015).

3.4 However, D1 does not indicate the specific moisture content of the swelling agent used in the coating step nor does it expressly state that it swells or gelatinizes by (absorbing) the moisture of the non-swelling particles. Thus, D1 fails to specifically state the precise modalities of the coating step, i.e., that the swelling agent adheres to the core by means of absorbing moisture from the non-swelling particles.

3.5 The appellant advances that the animal litter resulting from the method according to the present application may be seen as having superior clumping properties, see original application, page 11, lines 20-24, as the active clumping agent, i.e. the swelling agent, is kept on the surface of the particles, where the clumping bonds are formed. In addition, the litter has a dust content which is lower than known clumping litters (due to the drying process).

However, these stated properties are the same as those identified in paragraph 0021 of D1. Moreover, the measure of these properties of the resultant particles as expressed in clumping weight and strength, mesh size, bulk density and moisture content is identical to that given in the application, cf. figures 2 and 3 of D1 and the application, cf. main request under point 2.4 above. Therefore these effects are already identically achieved in D1.

Following from the above, the Board thus holds that the problem to be solved vis-à-vis D1 may at best be regarded as how to put into practice the coating step of the method taught in D1.

3.6 The appellant argues that paragraph 0013 of D1, lines 6-8, where it is stated that the powder coatings may be "augmented" with either or both of an odour control agent and an anti-microbial agent, would suggest as an obvious solution the addition of further adhesive agents to ensure adhesion of the coating powder to the core. However, such a reading of D1 is unsubstantiated by evidence, and finds no support in the clear and unambiguous wording of the cited passage which can only be understood as referring to the use of odour control or anti-microbial additives.

3.6.1 Rather, as D1 apart from particle size and relative amounts of the constituents only mentions moisture content of the agglomerate in the preparation of the coated end particles, it will be clear for the skilled person that relative moisture content must play an important role in the coating step. This will also be apparent to him from the fact that the sodium bentonite is in very fine (200 mesh) particulate and thus relatively dry powder form. The skilled person will as a matter of obviousness and in the course of routine optimization then determine the moisture content of the constituents, thus also of the bentonite powder, to ensure optimal coating and so arrive at the value claimed.

3.6.2 Alternatively, in order to realize a coating with sodium bentonite powder, the skilled person may look towards relevant prior art in the field, such as D2. That document, in paragraph 0040, teaches the use of

200 mesh fine powder sodium bentonite of 12% moisture content to coat humid fibrous core to form litter particles. The size and moisture content are specifically stated to facilitate binding of the coating to the humid core. In the light of this teaching the skilled person would also contemplate applying the same conditions when applying the bentonite powder coating in D1.

3.6.3 In either case the skilled person will thus arrive at the use of a swelling agent being a powder with a moisture content of less than 20% as required by method claim 1 of the first auxiliary request.

In so doing, the sodium bentonite powder will inherently "swell or gelatinize" by absorbing the moisture from the wetter core, see point 3.2 above.

3.7 Summing up, starting from D1 and taking into consideration the common general knowledge or the teaching of D2, the skilled person will as a matter of obviousness arrive the subject-matter of method claim 1 of the auxiliary request I in order to carry out the teaching of D1.

Therefore, the subject-matter of claim 1 of the first auxiliary request does not involve an inventive step and, therefore, auxiliary request I cannot be allowed.

4. Since none of the appellant's requests are considered allowable, the appeal of the appellant must fail.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis A. de Vries

Decision electronically authenticated