Datasheet for the decision
of 18 October 2013

Case Number: T 1207/11 - 3.2.07
Application Number: 03730980.4
Publication Number: 1521708
IPC: B65D5/62, B65D65/42, B65D81/24
Language of the proceedings: EN

Title of invention:
A METHOD OF PROVIDING A PACKAGE WITH A BARRIER AND THE PACKAGE
THUS OBTAINED

Patent Proprietor:
Tetra Laval Holdings & Finance S.A.

Opponent:
SIG Technology AG

Headword:

Relevant legal provisions:
EPC Art. 56, 84, 100(b), 123(2)
RPBA Art. 13
Keyword:
Inventive step - first auxiliary request (no)
Amendments - extension beyond the content of the application
as filed (description) (no)
Fresh ground for opposition - admitted (no)
Claims - clarity in opposition appeal proceedings - cannot be
contested in the case of combinations of claims as granted
Late filed argument - change of the party's case - admitted
(no)

Decisions cited:

Catchword:
Case Number: T 1207/11 - 3.2.07

DECISION
of Technical Board of Appeal 3.2.07
of 18 October 2013

Appellant: SIG Technology AG
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted on 4 March 2011 rejecting the opposition filed against European patent No. 1521708 pursuant to Article 101(2) EPC.

Composition of the Board:
Chairman: H. Meinders
Members: K. Poalas
E. Kossonakou
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the decision of the opposition division to reject the opposition against the European patent No. 1 521 708.

II. Opposition had been filed against the patent as a whole based on Article 100(a) EPC (lack of inventive step).

III. The opposition division found that this ground for opposition does not prejudice the maintenance of the patent as granted.

IV. The following documents of the opposition proceedings are relevant for the present decision:

D1: WO 02/44040 A1
D2: US 3 438 788
D5: WO 00/40404 A1.

V. Oral proceedings took place before the Board on 18 October 2013.

a) The appellant requested that the decision under appeal be set aside and that the European patent No. 1 521 708 be revoked.

b) The respondent (patent proprietor) requested that the decision under appeal be set aside and the patent maintained in accordance with the first auxiliary request filed with letter of 17 September 2013.

VI. Independent claims 1 and 22 according to the first auxiliary request read as follows (amendments over claims 1 and 22 as granted are depicted in bold):
"1. A method of providing a package (20, 50) for pourable food products, with an oxygen barrier, formed mainly of a fibre based packaging laminate, characterised in that it comprises the step (e) of applying, after filling and sealing of the package, a liquid oxygen barrier composition comprising a polymer dispersion or solution and nano-scale particles, as a coating, onto an outside surface of a selected part of the package, which selected part is at least a part in the group that consists of a seal (40a, 40b, 53), an opening device (30, 52), a plastic detail on the package and a plastic part (51) of the package".

"22. A filled and sealed package (20, 50) for a pourable food product, having an oxygen barrier, formed mainly of a fibre based packaging laminate, characterised in that it exhibits a coating, applied after filling and sealing of the package, on a selected part of an outside surface of the package, which coating is composed of a dried liquid oxygen barrier composition comprising a polymer dispersion or solution and nano-scale particles, and which selected part is at least a part in the group that consists of a seal (40a, 40b, 53), an opening device (30, 52), a plastic detail on the package and a plastic part (51) of the package".

VII. The appellant's arguments can be summarised as follows:

Claims 1 and 22 of the first auxiliary request - sufficiency of disclosure and clarity, Articles 100(b) and 84 EPC

In claims 1 and 21 nanometer(nm)-scale particles are now claimed. On the other hand, clay particles having micrometer(μm)-scale dimensions, i.e. having for
example an average widest dimension of 9 μm, are described in paragraph [0029] of the patent in suit as being nano-scale particles. This situation renders the claimed invention insufficiently disclosed, since the person skilled in the art does not know when he is working within the forbidden area of the claims. This fact renders also the subject-matter of claims 1 and 21 unclear, since the person skilled in the art does not know whether the claimed nano-scale particles have only nano-scale dimensions or possibly also a dimension in the micrometer(μm)-range.

Admissibility of new arguments concerning lack of inventive step based on the combination of the teachings of D1 and D5

The fact that in the appeal proceedings it was argued for the first time (during the oral proceedings) that there was lack of inventive step based on the combination of the teachings of D1 and D5 cannot take the respondent nor the Board by surprise because these documents were already in the proceedings. Thus, the Board should exercise its discretion according to Article 13(1) RPBA in favour of the appellant and admit this new argumentation line into the appeal proceedings.

Claim 1 of the first auxiliary request - Inventive step, Article 56 EPC

The application of a liquid oxygen barrier composition comprising a polymer dispersion to selected parts of the package provides said selected parts with an oxygen barrier layer, independent of any oxygen barrier properties on other parts of the package, see paragraph
[0011] of the patent in suit. The addition of nano-scale particles to such a polymer dispersion having oxygen barrier properties per se enhances its oxygen barrier properties, see paragraph [0026] of the patent in suit.

Thus the method of claim 1 solves two partial problems, namely the provision of oxygen barrier properties to a selected part of the package known from D1, independently of any oxygen barrier properties on other parts of the package, and the further improvement of the oxygen barrier properties of the emulsion used.

D2 teaches the skilled person the dipping of selected parts of a package into a SARAN™ emulsion in order to provide an oxygen barrier, see claim 1. D5 not only mentions such SARAN™ (PVDC) emulsion but it teaches also that the provision of nano-scale particles to thermoplastic film coatings improves the oxygen barrier properties of said coatings used in particular in the food packaging industry, see page 1, lines 27 to 30, page 3, lines 19 to 26 and claim 1.

The person skilled in the art seeking to solve the two above-mentioned independent partial problems would be led by the combination of the teachings of D1, D2 and D5 to the method according to claim 1 without the need to exercise an inventive activity.

Claim 22 of the first auxiliary request - Inventive step, Article 56 EPC

The argumentation presented above concerning lack of inventive step for the method according to claim 1 is mutatis mutandis applicable to the package according to claim 22.
Amended description - not allowable amendments, Article 123(2) EPC

Paragraphs [0014], [0024] and [0041] of the patent as granted have been adapted by the respondent to the wording of the method according to claim 1 of the first auxiliary request.

As a consequence thereof the "invention" mentioned in unamended paragraph [0037] of the description is made to correspond to the method according to claim 1 of the first auxiliary request disclosing an oxygen barrier composition comprising in addition to the polymer dispersion also nano-scale particles. It does not correspond any longer to the method according to claim 1 of the patent as granted without said nano-scale particles. This amended definition of the "invention" as mentioned in paragraph [0037] was not disclosed in the originally filed application and violates as such the requirements of Article 123(2) EPC.

VIII. The respondent argued essentially as follows:

Claims 1 and 22 of the first auxiliary request - sufficiency of disclosure and clarity, Articles 100(b) and 84 EPC

The respondent cannot agree to the introduction of the fresh ground for opposition under Article 100(b) EPC (sufficiency of disclosure) presented for the first time by the appellant during the appeal proceedings.

Since claims 1 and 22 of the first auxiliary request correspond to claims 8 and 28 of the patent as granted
without their respective optional part, there is no possibility for the Board to examine compliance with Article 84 EPC for these claims, since the amendments allegedly creating the lack of clarity consist of a combination of claims as granted.

Admissibility of new arguments concerning lack of inventive step based on the combination of the teachings of D1 and D5

The Board should exercise its discretion according to Article 13(1) RPBA in favour of the respondent and not allow the appellant to amend its case by providing new arguments concerning lack of inventive step based on the combination of the teachings of D1 and D5. They are presented at the latest possible stage in the appeal proceedings, namely during the oral proceedings. This new argumentation line takes the respondent by surprise and it is not prepared to deal with it.

Claim 1 of the first auxiliary request - Inventive step, Article 56 EPC

Due to the incompatibility of the coating methods of D2 and D5 and the teaching of D5 that the use of SARAN™ as barrier coating material should be avoided the skilled person would not be led by the combination of the teachings of D1, D2 and D5 to the method according to claim 1.

Claim 22 of the first auxiliary request - Inventive step, Article 56 EPC

The argumentation presented above concerning lack of inventive step for the method according to claim 1 is
mutatis mutandis applicable to the package according to claim 22.

Amended description - not allowable amendments, Article 123(2) EPC

The amendments made in paragraphs [0014], [0024] and [0041] of the description concern the adaptation of the description to the wording of claim 1 according to the first auxiliary request. It follows that neither the amendments as such nor their influence on paragraph [0037], if at all present, can violate the requirements of Article 123(2) EPC.

Reasons for the Decision

1. Claims 1 and 22 of the first auxiliary request are identical with claims 8 and 28 of the patent as granted without their respective optional part. The latter required that the nano-scale particles are "preferably particles in the group that consists of clay particles and silica particles, and combinations thereof".

2. Admissibility of objections under Article 100(b) EPC raised for the first time in the appeal proceedings

2.1 The legal concept "fresh ground for opposition" as used in G 10/91 (OJ EPO 1993, 420, point 18 of the reasons) must be interpreted as having been intended to refer to a ground for opposition which was neither raised and substantiated in the notice of opposition, nor introduced into the proceedings by the opposition division, see Case Law of the Boards of Appeal of the EPO, 7th edition, 2013, IV.D.5.3.1, first sentence. It has been further established in G 10/91 (supra) and G 7/95 (OJ EPO 1996, 626) that such a fresh ground for
opposition cannot be introduced into the appeal proceedings without the agreement of the patent proprietor.

2.2 The patent in suit has been opposed only under Article 100(a) EPC on the ground of lack of inventive step (Article 56 EPC). The appellant raised for the first time during the appeal proceedings an objection of lack of sufficient disclosure under the ground for opposition of Article 100(b) EPC against claims 1 and 22 of the first auxiliary request, i.e. against claims 8 and 28 of the patent as granted without their respective optional part, see point 1 above.

2.3 According to the established case law of the Boards of Appeal the introduction of a feature into an independent claim, which feature was present in the claims of the patent as granted, cannot be considered as an amendment which legitimates the admittance of an objection under Article 100(b) EPC as a fresh ground of opposition, which ground requires that a European patent as a whole had to disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art, see Case Law of the Boards of Appeal of the EPO, 7th edition, 2013, IV.D.5.3.3, fourth paragraph.

2.4 In the present case the features introduced into the independent claims 1 and 22 of the first auxiliary request constitute the sole, non-optional features of dependent claims 8 and 28 of the patent as granted, see point 1 above. Since the inclusion of nano-particles in the oxygen barrier composition is clearly one of the essential embodiments of the invention, any objections regarding sufficiency of disclosure should have been raised with the notice of opposition, or at least in
the opposition proceedings. Doing this only at the moment at which the combination of the independent
claims with the dependent claims 8 and 28 takes place constitutes the raising of a fresh ground for
opposition under Article 100(b) EPC.

2.5 Further, the respondent/patent proprietor explicitly
withholds its agreement to the introduction of said fresh ground for opposition into the appeal
proceedings.

2.6 Given this situation the Board following the above-
mentioned established case law, see point 2.3 above,
does not admit the fresh ground of opposition under
Article 100(b) EPC into the appeal proceedings.

3. Consideration of the objection raised under Article 84
EPC against claims 1 and 22 of the first auxiliary
request

3.1 As pointed out under point 1 above, claims 1 and 22 of
the first auxiliary request correspond to claims 8 and
28 of the patent as granted without their respective
optional part.

3.2 The Board follows the established case law of the
Boards of Appeal in this matter as well, namely that a
combination of claims as granted according to their
straightforward dependency is not to be considered as
substantive amendment which allows for an examination
under Article 84 EPC, see Case Law of the Boards of
Appeal of the EPO, 7th edition, 2013, IV.D.4.5. The
Board considers further that the exceptional situations
where Boards of Appeal have admitted objections based
on Article 84 EPC, such as when the assessment of the
claimed subject-matter depends entirely on the
technical significance of the sole added feature, the latter defining the only difference over the prior art, are not applicable in the present case. It was also not argued by the appellant that in the present case such an exception applied.

3.3 The consequence is that compliance of claims 1 and 22 of the first auxiliary request with the requirements of Article 84 EPC cannot be contested.

4. **Admissibility of new arguments concerning lack of inventive step based on the combination of the teachings of D1 and D5**

4.1 According to Article 13(1) RPBA it is at the Board's discretion to admit any amendment to the appellant's case after it has filed its statement of grounds of appeal. In this context, also the admission of a new argument brought forward in the appeal proceedings by a party which would have the effect of amending its case, even if the argument is based on evidence and facts already in the proceedings, in particular if it is presented without any reasonable explanation or justification regarding its late submission, may be subject to the exercise of discretion by the Board of Appeal, see T 1621/09, referred to in the Case Law of the Boards of Appeal of the EPO, 7th edition, 2013, IV.C.1.4.4. b), fifth paragraph.

In such a case, the complexity of the new subject-matter submitted, the state of the proceedings at the time of the submission and the need for procedural economy are, among others, to be taken into account.

An explanation or proper justification in the present case could e.g. exist, if the late submission were in response to amended requests which were not part of the
response to the appeal or if it resulted from a direction by the Board or if the Board itself raised the issue.

4.2 In this respect the Board notes the following:

(a) The decision under appeal dealt only with the combination of the teachings of D1 and D2 as well as of D6 and D2. The appeal dealt with these and introduced the further possible combination of the teachings of D7 and D2. To these three approaches the respondent replied by filing a first and a second auxiliary request. In its rejoinder the appellant dealt with these auxiliary requests on the basis of the already mentioned documents, (apart from the mention of WO-A-0 117 771 and WO-A-0 117 774, neither of which is D5).

The combination of the teachings of D1 and D5 was raised at the last possible stage of the appeal proceedings, namely during the oral proceedings, and constitutes a change in the appellant's case on inventive step.

The Board cannot see any reason why this new line of argumentation could not have been raised earlier. The present first auxiliary request, to the extent it concerns the addition of the feature of the nano-scale particles, is identical to the second auxiliary request submitted by the respondent in its reply to the grounds of appeal.

The objection thus could have been raised without any difficulty in the appellant's rejoinder dated 26 July 2012. The Board notes also that there have been two further written submissions before the oral
proceedings, namely those dated 18 September 2013 and 2 October 2013, where the issue could have been broached.

(b) The current state of the proceedings and the need for procedural economy do not allow for an admission of this late objection either, since it would require at least further preparation time for the respondent as well as for the Board, if not an adjournment of the oral proceedings for that purpose.

4.3 In the light of these considerations, the Board exercises its discretion according to Article 13(1) RPBA and decides not to admit the appellant's new argumentation line concerning lack of inventive step based on the combination of the teachings of D1 and D5 into the appeal proceedings.

5. **Claim 1 of the first auxiliary request - Inventive step, Article 56 EPC**

5.1 The method according to claim 1 differs from the method known from D1 in that it comprises the step of applying, after filling and sealing of the package, a liquid oxygen barrier composition comprising a polymer dispersion or solution and nano-scale particles, as a coating, onto an outside surface of a selected part of the package, which selected part is at least a part in the group that consists of a seal, an opening device, a plastic detail on the package and a plastic part of the package.

5.2 According to claim 1 the liquid oxygen barrier composition to be used comprises a polymer dispersion or solution and nano-scale particles. According to the description, paragraph [0026], the oxygen
impermeability of the liquid oxygen barrier composition is directly dependent not only on the selected polymer dispersion or solution but also on the selected nano-scale particles distributed within said dispersion or solution. Thus, there is a synergistic effect between the polymer dispersion or solution and the nano-scale particles selected where it concerns providing oxygen impermeability.

5.3 Therefore, the Board does not follow the appellant's argument that there are two independent partial problems to be solved by the characterising features of claim 1.

Starting from the method known from D1 the problem to be solved is to be seen in the improvement of the oxygen impermeability of selected parts of the package known from D1, independent of any oxygen barrier properties on the other parts of the package, see paragraph [0011] of the patent in suit.

5.4 The question at stake is thus whether the skilled person starting from the method known from D1 and confronted with the above-mentioned problem would take into consideration the teachings of D2 as well as D5, would combine said teachings and would thus arrive at the method according to claim 1 without exercising an inventive activity.

5.5 D2 proposes a process using a SARAN™ emulsion or solution, in which the plastic food container portion that is to be provided with an oxygen barrier is dipped, see claim 2 and the example of D2. In contrast, D5 refers to the production of a thermoplastic film intended for the packaging of food products, such as wrapping the same in a transparent film, which film is
coated by a mixture of a thermoplastic additive containing nano-particles and a polymeric binder. In this respect, D5 teaches that the coating process can be executed by well-known means such as gravure coating, roll coating or spraying, to achieve a coating on such films. Gravure coating is preferred to achieve a thin even coating, see page 7, lines 30 to 31. There is no teaching in D5 that a dipping process is also suitable for applying a nano-scale particle-containing coating as known from D5. Thus there is no concordance between the teachings of D2 and D5 as far as the coating methods proposed therein are concerned.

Further, D5 teaches in its paragraph bridging pages 1 and 2 that halogenic barrier materials like SARAN™ (PVDC) are difficult to recycle, are expensive and discolor above certain radiation levels. Therefore, it proposes its new oxygen barrier coating as an alternative that gives improved recyclability and improved processing characteristics.

The skilled person is therefore led by D5 in a direction clearly pointing away from using the halogenic barrier material SARAN™ as barrier coating material, with or without nano-scale particles distributed therein.

Thus, the person skilled in the art would refrain from adding nano-scale particles into the SARAN™ emulsion or solution known from D2 in order to provide a barrier coating material for the package known from D1.

5.6 In view of the above negative conclusions regarding the compatibility of the teachings of D2 and D5 the Board
considers that the method according to claim 1 involves an inventive step.

6. **Claim 22 of the first auxiliary request - Inventive step, Article 56 EPC**

The argumentation presented under point 5 above is *mutatis mutandis* applicable to the package according to claim 22. Claim 22 thus also meets the requirements of Article 56 EPC.

7. **Amended description - not allowable amendments, Article 123(2) EPC**

7.1 Paragraph [0013] of the description of the patent as granted, which remained unchanged, defines that the method "according to the invention" is described "*in the claims*" (emphasis added by the Board). According to said paragraph "the invention" therefore consists *inter alia* of the method of claim 8 of the patent as granted.

7.2 Paragraph [0037] of the description of the patent as granted, which also remained unchanged, states that "[i]n the following, the invention will be described in detail with reference to a preferred embodiment and to the drawings ..." (emphasis added by the Board). This paragraph, by reference to "the invention", is therefore in concordance with the "invention" as mentioned in paragraph [0013], and thus in concordance with *inter alia* the method claim 8 of the patent as granted, which claim corresponds to the method claim 11 as originally filed.

7.3 Paragraphs [0014], [0024] and [0041] of the description of the patent as granted have been adapted to the
wording of the method according to claim 1 of the first auxiliary request by taking up the expression "nano-scale particles" present as sole non-optional feature in method claim 8 of the patent as granted, i.e. present in method claim 11 as originally filed.

7.4 For this reason, contrary to the arguments of the appellant, the amendments made in paragraphs [0014], [0024] and [0041] do not define a method which was not already described, i.e. defined as the "invention" according to the paragraphs [0013] and [0037] of the patent as granted, see points 7.1 and 7.2 above.

7.5 Thus, the amendments made in paragraphs [0014], [0024] and [0041] of the description of the patent as granted do not violate the requirements of Article 123(2) EPC.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of the following documents:

   description: pages 2 and 6 to 8 of the patent as granted, and pages 3, 4 and 5 as filed at the oral proceedings,

   claims: 1 to 35 of the first auxiliary request filed with letter of 17 September 2013,

   figures: figures 1 to 3 of the patent as granted.

The Registrar: The Chairman:

G. Nachtigall H. Meinders

Decision electronically authenticated