PATENTAMTS

BESCHWERDEKAMMERN BOARDS OF APPEAL OF OFFICE

CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPÉEN DES BREVETS

Internal distribution code:

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

Datasheet for the decision of 10 April 2019

Case Number: T 1688/15 - 3.2.04

Application Number: 08841651.6

Publication Number: 2234522

A47J31/30, A47J31/06, IPC:

B65D65/46, B65D85/804

Language of the proceedings: ΕN

Title of invention:

FUNNEL ELEMENT FOR MOCHA PROVIDED WITH PERFORATION MEANS AND CARTRIDGE THEREFOR

Patent Proprietor:

Illycaffè S.p.A.

Opponent:

Nestec S.A.

Headword:

Relevant legal provisions:

EPC Art. 54(2), 56, 83, 111(1) RPBA Art. 12(4)

Keyword:

Novelty - main request (no) - auxiliary request (yes)

Inventive step - (yes)

Sufficiency of disclosure - (yes)

Late-filed evidence - admitted (yes)

Late-filed request - admitted (yes)

Appeal decision - remittal to the department of first instance (no)

Decisions cited:

Catchword:



Beschwerdekammern **Boards of Appeal** Chambres de recours

Boards of Appeal of the European Patent Office Richard-Reitzner-Allee 8 85540 Haar **GERMANY**

Tel. +49 (0)89 2399-0 Fax +49 (0)89 2399-4465

Case Number: T 1688/15 - 3.2.04

DECISION of Technical Board of Appeal 3.2.04 of 10 April 2019

Appellant: Nestec S.A.

Avenue Nestlé 55 (Opponent)

1800 Vevey (CH)

Representative: Rupp, Christian

> Mitscherlich PartmbB Patent- und Rechtsanwälte

Sonnenstraße 33 80331 München (DE)

Respondent: Illycaffè S.p.A.

Via Flavia 110 (Patent Proprietor) 34147 Trieste (IT)

Crugnola, Pietro Representative:

Luppi Intellectual Property Srl

Viale Corassori, 54 41124 Modena (IT)

Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on

13 July 2015 concerning maintenance of the European Patent No. 2234522 in amended form.

Composition of the Board:

Chairman A. de Vries

G. Martin Gonzalez Members:

W. Van der Eijk

- 1 - T 1688/15

Summary of Facts and Submissions

- I. The Appellant-Opponent lodged an appeal, received on 20 August 2015, against the interlocutory decision of the Opposition Division of the European Patent Office posted on 13 July 2015 concerning maintenance of the European Patent No. 2 234 522 in amended form, and simultaneously paid the appeal fee. The statement setting out the grounds of appeal was received on 11 November 2015.
- II. Opposition was filed under Article 100(a) EPC based on lack of novelty and on lack of inventive step, under Article 100(b) EPC based on insufficiency of disclosure and under Article 100(c) EPC based on added subjectmatter.

The Opposition Division held that the patent as amended according to an auxiliary request 8 and the invention to which it related met the requirements of the EPC, having regard inter alia to the following evidence:

- (D3) WO 2008/155226 A1
- (D7) WO 03/073896 A1
- (D12) US 2005/0136155 A1
- (D13) WO 2005/030482 A1
- (D15) EP 1 440 903 A1
- (D18) WO 02/058522 A2
- (D24) GB 998,381
- (D37) FR 2 644 679 A1
- (D38) EP 0 324 072 A1
- III. The Appellant-Opponent filed the following further documents with the statement of grounds:

- 2 - T 1688/15

- (D39) WO 2007/072020 A2
- (D40) US 6,025,000
- IV. In preparation for oral proceedings the Board issued a communication dated 31 January 2019 setting out its provisional opinion on the relevant issues.

Oral proceedings were duly held on 10 April 2019.

V. The Appellant-Opponent requests that the decision under appeal be set aside and that the European patent No. 2234522 be revoked.

The Respondent-Proprietor requests that the decision under appeal be set aside and the patent be maintained on the basis of its main request or one of auxiliary requests 1-3, all filed with letter dated 21 March 2015 [sic] (received on 21 March 2016), or, in case these requests are not admitted, to dismiss the appeal and thus to maintain the patent as upheld by the Opposition Division.

- VI. The independent claims according to the relevant requests read as follows:
 - (a) Main request
 - "1. Container (1; la) arranged for containing a dosed quantity of a solid product (P), from said solid product (P) a beverage being extractable, and shaped so as to be usable in a coffee machine, said beverage being extractable by means of said coffee machine, said container (1; la) comprising wall means (4, 4a, 5, 5a, 6; 7, 8, 9; 40, 41) defining a cavity (3) suitable for containing said solid product (P), said wall means (4, 4a, 5, 5a, 6; 7, 8, 9; 40, 41) being made of a material

- 3 - T 1688/15

that is impermeable to water and oxygen, characterised in that said material is a biodegradable material, wherein said biodegradable material is selected from a group consisting of: polyhydroxyalkanoates and microbial polyesters."

"2. Container (la) arranged for containing a dosed quantity of a solid product (P), from said solid product (P) a beverage being extractable, and shaped so as to be usable in a coffee machine, said beverage being extractable by means of said coffee machine, said container (la) comprising wall means (7, 8, 9) defining a cavity (3) suitable for containing said solid product (P), said wall means (7, 8, 9) being made of a material that is impermeable to water and oxygen, characterised in that said wall means (7, 8, 9) defines an at least partially stiff body (2a) of said container (la), said cavity (3) being comprised in said at least partially stiff body (2a), wherein said wall means (7, 8, 9) comprises a side wall (7) connected to a pair of mutually opposite end walls (8, 9) and said end walls(8, 9) are made of an edible film."

(b) First auxiliary request

Claim 1 as in the main request.

Claim 2 is as in the main request but with the following feature added at the end of the claim:
", wherein said edible film is soluble in hot water."

(c) Second auxiliary request

Claim 1 as in the main request.

Independent claim 2 has been deleted in this request.

- 4 - T 1688/15

VII. The Appellant-Opponent argued as follows:

The invention according to all requests is insufficiently disclosed. New documents D39 and D40 should be admitted into the proceedings. The subject-matter of claim 1 of all requests is either not new or lacks an inventive step in the light of documents D7, D12, D13, D39 and common general knowledge. The subject-matter of independent claim 2 (main and first auxiliary requests) is not new in view of D40.

VIII. The Respondent-Proprietor argued as follows:

The invention is sufficiently disclosed. Late filed evidence D39 and D40 is not admissible. If admitted, remittal to first instance is appropriate and thus requested. The independent claims of all requests are new and involve an inventive step in the light of the cited prior art.

Reasons for the Decision

- 1. The appeal is admissible.
- 2. Background

The invention relates to containers for a dosed quantity of a solid product, typically single-dose ground coffee capsules or pods for espresso or mocha coffee machines. It is known to package the pods or capsules to be preserved until the moment of use in individual additional protective enclosures, made of suitable barrier material impermeable to atmospheric oxygen and ambient humidity, in order to preserve the organoleptic properties of the product. The invention

- 5 - T 1688/15

aims at avoiding the requirement for such an additional individual protective enclosure. To this aim, the claimed containers comprise wall means that are made of a material that is impermeable to water and oxygen, wherein

(claim 1) the material is biodegradable and is selected from a group consisting of: polyhydroxyalkanoates and microbial polyesters; or

(claim 2) the wall means define a partially stiff body with end walls that are made of an edible film.

- 3. Admissibility
- 3.1 New documents D39, D40
- 3.1.1 The admission of new evidence D39, D40, filed with the statement of grounds of appeal and thus outside the opposition period is at the discretion of the Board, Articles 114(2) EPC and Article 12(4) RPBA.
- 3.1.2 According to the Appellant-Opponent the documents are in response to the Opposition Division's interpretation of the claims, see impugned decision pages 9 and 10. According to that interpretation, the claim language is restricted to wall means being made solely from the claimed material biodegradable PHA material (claim 1) or edible film (claim 2). These appear to show walls made entirely of a given material. There thus appears to be a justification for their late filing upon appeal.
- 3.1.3 The documents' contents, in the board's view, are also prima facie highly relevant to the novelty issue:

Document D39 is of relevance for claim 1. The document describes polyhydroxybutyrates (PHB), that belongs to

- 6 - T 1688/15

the claimed group of polyhydroxyalkanoates (PHA) materials, as the material for manufacturing single-dose capsules, see D39, page 5, line 15, which capsules may comprise "a screen of a liquid-impermeable sheet material", see page 3, lines 32 ff; page 11, lines 1-2.

Document D40 is of relevance for claim 2. It describes in column 2, lines 3-6 in combination with column 4, lines 19-21, an impermeable single layer film, that can be made of polyvinyl alcohol (PVA or PVOH), which is an edible material.

3.2 Main and auxiliary requests 1-3

These requests were not part of the appealed decision, but were filed with the reply to the statement of grounds of the appeal. They are thus subject to the discretion of the Board under Article 12(4) RPBA.

As noted in the communication, these requests appear to be admissible, since they address the Appellant's novelty and inventive step objections based in part on new evidence D39 and D40 by further limiting the independent claims. The amendments concerned are moreover straightforward, namely include in the independent claim the features of upheld claim 3, upheld claim 18 and deleting claims. They therefore do not give rise to further issues. Moreover the requests were filed at the earliest possible appeal stage with the reply to the appeal and the filing of further evidence D39, D40 against novelty.

During the oral proceedings, the Appellant-Opponent withdrew their objections to the admissibility of these requests. Thus, absent any further submissions the Board sees no reason to change its point of view. The

- 7 - T 1688/15

Board therefore decided to admit these requests under Article 12(4) RPBA and Rule 80 EPC.

Finally, as the Respondent Proprietor's main and auxiliary requests were filed in response to new evidence D39 and D40, it does not appear equitable to the Board to admit one but not the other.

- 3.3 In view of the above, the Board, exercising its discretion under Article 12(4) RPBA, decided to admit documents D39 and D40 and the main and auxiliary requests 1 to 3 into the proceedings.
- 4. Request for remittal

At the oral proceedings the Respondent-Proprietor for the first time requested remittal to the first instance in case documents D39 or D40 were to be admitted, so that novelty and inventive step can be examined in the light of these documents in two instances. The Appellant-Opponent however requests that the case not be remitted for reasons of overall procedural economy.

As variously stated in case law, there is no absolute right to have an issue decided at two instances, see Case Law of the Boards of Appeal, 8th edition 2016 (CLBA), IV.E.7.6.1. Nor is it mandatory to remit a case every time a fresh case is raised, CLBA, IV.E.7.6.5. Various decisions, see CLBA, IV.E.7.2.1, 7.2., 7.2.4 and 7.2.6, and the decisions cited therein, e.g. T1913/06, T1060/96, T402/01, T111/98, and T1600/06, when deciding remittal or not, take into account such factors as public interest, procedural efficiency, complexity of the matter, whether the right to be heard is observed, and whether the legal and factual framework is fundamentally changed.

- 8 - T 1688/15

In the present case, the Board notes that the relevant content of D39 and D40 is not particularly complex.

Moreover, both documents were filed upon appeal at the earliest possible appeal stage, and were thus known to the Respondent-Proprietor from the beginning of the appeal. Indeed the Respondent-Proprietor in response submitted main and auxiliary requests with amended claims together with detailed arguments addressing the objections based on these documents. The Board is thus satisfied that the Respondent-Proprietor has had ample opportunity to respond to the documents.

Given that the new documents can be seen as a response to the finding of the contested decision (see above) the Board does not consider that the introduction of the new document raises a fundamentally different case from that on which the contested decision was based.

Furthermore, as the Appellant-Opponent observes, it is in the interest of the public and of legal certainty to have a final decision within a reasonable time frame.

- 4.3 Weighing all these factors, the Board decided in the exercise of its discretionary power under Article 111(1) EPC not to remit the case to the department of first instance.
- 5. Main and first auxiliary request- Novelty

In the Board's view document D40 anticipates all the features of independent claim 2 of the main and first auxiliary request.

5.1 It is undisputed that D40 discloses a container 1 with a dosed quantity of coffee and shaped to be extractable

- 9 - T 1688/15

by means of a coffee machine, see D40, column 1, lines 55-65, wherein the material used for the container's wall means is impermeable to water and oxygen, thus requiring no outer package, see column 1, line 60 and column 2, lines 4-6.

- 5.2 The Board is also of the opinion, as discussed in the following points, that the container of D40 due to corrugations shown in figures 3 and 6, see column 3, line 53 to 65, and column 6, line 37, also has an at least partially stiff body, that further comprises end walls 11 made of a single layer of polyvinyl alcohol (PVA or PVOH), see D40 column 4, lines 20-21, and thus edible and soluble in hot water as claimed.
- 5.2.1 The Respondent-Proprietor contends that D40 only describes a flexible sachet made of two symmetric concave-shaped halves that neither define a side wall and end walls in the sense of the contested claim i.e. as separate entities nor can it be considered stiff in the sense of the contested patent.
- 5.2.2 However, as put forward by the Appellant-Opponent in respect of the side wall and end walls, the claim wording only requires a side wall connected to end walls, without further specification as to the connection between them or whether they must be manufactured as separate parts. Within the scope of the claim the wall and ends can be realized from a single piece and consequently connected.

The Board therefore holds that in the known container structure disclosed in D40, two opposite end walls - upper and lower plane surfaces 11 of the moulded sheets 6,7 - and a side wall - side part of the sheets 6,7 having the corrugations 8, 12 and 13 - are directly and

- 10 - T 1688/15

unambiguously identifiable, see figures 1-3, thereby anticipating the disputed features.

5.2.3 The Board is also in agreement with the AppellantOpponent, that claim 2 only requires a partially stiff
body without further requiring any specific stiffness
direction, plane or value. Thus, although the known
container or sachet of D40 is generally described as a
flexible sachet, see column 1, line 66, the Board also
considers that the skilled person unambiguously
recognises that the corrugations 8, 12 and 13 (see
column 6, line 37) of the side walls of D40 necessarily
confer stiffness to the structure, that the walls would
not have without them.

The Respondent-Proprietor puts forward that the corrugations of the known structure are pre-formed to avoid random folds during expansion, cf. D40, column 3, lines 44-65. That the expansion takes place in a controlled manner due to the fold lines does not exclude or contradict that the material is rendered stiffer in the direction of the fold (though not perpendicular to it) as is a well known property of such corrugated material. The claim does not require any particular level or degree of stiffness, stating merely that "the wall means defines an at least partially stiff body". In that the corrugations render the side walls stiffer along the fold lines the walls are thus partially stiff.

5.3 As regards the direct and unambiguous disclosure of an edible film in D40, it is not under dispute that the material described in D40: polyvinyl alcohol (PVA or PVOH), is edible and soluble in hot water. Indeed the patent itself mentions polyvinyl alcohol as a preferred example in this context, paragraph [0025] and claim 6.

- 11 - T 1688/15

The Respondent-Proprietor argues, however, that D40 does not unambiguously disclose a single layer sheet made completely of PVA, since D40 describes a preferred embodiment in which the sheet is a multilayer sheet, where PVA is only one of the various alternative materials and only for the central layer, see column 4, lines 25-35. As the other materials present in the multilayer preferred sheet structure are not edible, the so constructed film is thus not edible.

5.3.1 However, the preceding lines, which list a variety of materials including polyvinyl alcohol (PVA), also include a direct and unambiguous disclosure of an alternative single layer embodiment, cf. column 4, lines 15-21: "The sheets may be made from a flexible material such as... and polyvinyl alcohol (PVA), and may be single layer sheets ... ". The list of materials including PVA is to be read in conjunction with both single and multilayer embodiments. The list is short and does not include any indication that some of those materials are specific only to either one or the other of the single or multi-layer embodiments. The following lines 25 to 33 of column 4 at best provide guidance for recommended material combinations for multilayers. Thus the skilled person reads this passage as disclosing any of the short list of materials mentioned for use in single or multilayer compositions with a preference for certain combinations of materials for multilayers. As far as single layers are concerned, column 4, lines 33 to 35, states "that the use of biodegradable or hydrosoluble material is also possible as a single layer", but this would apply in any case to known water soluble (and edible) PVA. That multilayer material combinations are stated to be preferred does not lead the skilled person to disregard the disclosure of such single layer described embodiments. In the Board's view - 12 - T 1688/15

the identification in the description of embodiments as "more preferred" cannot negate the disclosure of less preferred embodiments or render that disclosure somehow less direct and unambiguous.

- 5.3.2 In the light of the above the Board holds that the final features of claim 2 that the end walls are made of edible film (main request) that is hot water soluble (auxiliary request 1) are also directly and unambiguously disclosed in D40 in the single PVA (or PVOH) layer described in D40 as forming the entire capsule including the opposite end walls.
- 5.4 In view of the above, the Board concludes that claim 2 of main and first auxiliary requests is not new in the sense of Article 54(2) EPC in the light of D40.
- 6. Second auxiliary request
- 6.1 The second auxiliary request includes a single independent claim 1 which is as claim 1 in the version upheld by the Opposition Division but for the added feature that the container is shaped so as to be usable in a coffee machine by which the beverage is extractable. Otherwise the claim defines the material of the wall means, which is impermeable to water and oxygen as biodegradable selected from the group consisting of polyhydroxyalkanoates and microbial polyesters.

Claim 1 of the second auxiliary request combines originally filed claims 24, 25, the biodegradable alternative of claim 26 as filed and the two claimed materials from the list of materials in claim 27 as filed. The amendments thus have a clear basis in the

- 13 - T 1688/15

application as filed and do not add subject-matter, Art 123(2) EPC.

Vis-a-vis granted claim 1 amended claim 1 of the auxiliary request 2 is limited to PHAs and microbial polyesters and narrows the materials by the added features of claim 5 concerning the shape being usable in a coffee machine. Consequently, the scope of protection has not been extended, Art 123(3) EPC.

- 6.2 In their written submission the Appellant-Opponent raised the issue of lack of sufficiency of disclosure.

 At the oral proceedings before the Board they refrained from further comment.
- 6.2.1 In respect of sufficiency, the Opposition Division found, see page 3 of the impugned decision, that the skilled person, after reading the patent specification, is in a position to realize a wall means made of biodegradable material that is water and oxygen impermeable by selecting a suitable polyhydroxyalkanoate (PHA) or microbial polyester and that he does so without undue burden. The Division held that the information in the patent specification is sufficient to enable the skilled person to arrive at the determination of the suitable material for the wall means by routine trial.
- 6.2.2 As noted by the Board in its written communication, this issue hinges partly on the interpretation of the feature of both independent claims that the material is impermeable to water and oxygen. The Appellant-Opponent submitted that a complete impermeability is not reconcilable with the further required properties that the material is biodegradable, edible or in the form of an edible film. The Board finds itself, however, in

this respect in agreement with the conclusions of the Opposition Division (see impugned decision, page 3) that the skilled person contextually reading the disputed feature with a mind willing to understand, would conclude that it does not call for complete impermeability, but for the necessary degree of impermeability for the intended lifetime of the product. This is, in the Board's opinion, so in view of both a technically sensible reading of the claims in their own right and when read in the light of the description and figures that are directed at the preservation of the product until the moment of use (see specification paragraphs [0006] ff.).

6.2.3 The Appellant-Opponent further submitted that due to lack of information in the disclosure, the skilled person is not able, without undue burden, to identify a suitable material that meets the requirements of claim 1, namely a material that combines the allegedly contradictory properties of complete and permanent impermeability with biodegradability. The Board on the contrary considers, as it also remarked in its communication, that the skilled person in the art of packaging, drawing on their common general knowledge, is able to determine a suitable thickness and material for a specific intended lifetime of the product by routine trial, without the need of further guidance and without undue burden. In detail, as acknowledged by the Appellant-Opponent on page 10 of the statement of grounds "a large variety of different tests exist in the present technical field of food packaging, such as e.g. the norm "ASTM F1307-02", "ASTM D3985", "ASTM F1307" or "ASTM F1927" which are used for obtaining e.g. the oxygen transmission rate...". Such tests appear routine, and would be part of the skilled person's knowledge when carrying out the claimed

- 15 - T 1688/15

invention. A skilled person would thus be able with the help of these tests and a reasonable amount of routine trial to identify a suitable material that meets the intended water and oxygen barrier properties according to the claim. The Board additionally noted that prior art documents e.g. D3, D7 or D15 also describe packages or package components requiring other biodegradable materials that are impermeable to water and oxygen without providing more guidance or degree of detail in respect of those materials than in the contested patent, see pages 8,9 of the Respondent-Proprietor's reply dated 21 March 2015 (received on 21 March 2016).

- 6.2.4 Absent any further submissions from the Appellant-Opponent the Board sees no reason to change its point of view. It thus holds that the claimed invention is sufficiently disclosed in the sense of Article 83 EPC.
- 7. Second auxiliary request novelty

The Appellant-Opponent challenges novelty of claim 1 over the disclosure of documents D12, D13 and D39.

- 7.1 The issue hinges partly on the interpretation of claim 1 which is under dispute. The Opposition Division interpreted claim 1 as requiring that the (whole) wall means is made of the claimed biodegradable material: polyhydroxyalkanoates (PHA) or microbial polyester. It therefore held certain known layered structures having at least one layer made of different material as excluded from the scope of the claim.
- 7.2 While not fully concurring with the argumentation of the Opposition Division, the Board also considers certain layered structures as outside the scope of the claim insofar as claim 1 explicitly calls for the

- 16 - T 1688/15

biodegradable material itself to confer the barrier properties to the wall means: "wall means...being made of a material that is impermeable to water and oxygen...said material is a biodegradable material...". This formulation excludes, in the Board's opinion, layered wall structures comprising a layer of biodegradable material (PHA or microbial polyester), itself not providing the impermeability properties which are provided by other layers. Therefore, the mere presence of a layer or of traces of PHA or microbial polyester in an impermeable multi-layered structure, does not meet the requirements of the contested claim if the impermeability is achieved by means of another layer, since the PHA or microbial polyester material is thus not in a form that is impermeable to water and oxygen, as required by the claim.

- 7.3 Turning to the prior art disclosures, D12 describes a porous web (see paragraph [0001]) of a porous infusion beverage package to be immersed in water, see paragraph [0007]. The porous web has a porous substrate made of polyhydroxybutyrate PHB, which is a subgroup of the claimed polyhydroxyalkanoates or PHA (see paragraph [0032]). The substrate is rendered hydrophilic by a coating of a different material i.e. a polysaccharide (see paragraphs [0056] and [0057]) to reduce the sink time, see paragraph [0008], but is still permeable. The known web is thus not impermeable, as required by the contested claim.
- 7.4 Document D13 discloses a layered structure with a sealant layer also made of polyhydroxybutyrate or PHB(see page 4, lines 24-26). The sealant layer imparts appropriate sealing properties to the sheet material i.e. different sealing strengths and sealing temperatures, see page 4, lines 5-17, for the bonding

- 17 - T 1688/15

regions between the two sheets that build the package. It is however not described in D13 that this material imparts oxygen impermeability to the sheet structure. On the contrary, oxygen barrier properties are described as optional and, if included, are obtained by means of an additional layer coated on the substrate layer and made of a number of other possible different materials (PVOH, EVOH, starch, starch derivatives, inorganic oxides, nitrides, or inorganic oxide nitrides), see page 3, line 27 - page 4, line 2. It is therefore not described in D13 that the PHB material forming the sealant layer is in a form that provides oxygen impermeability, as required by the contested claim.

7.5 Figure 3 of D39 describes a beverage capsule having an inner capsule body 20 formed from a filtration sheet material and retaining a beverage preparation, see page 1, lines 30 ff, and an outer impermeable screen 24, which is impermeable to water and oxygen, see page 3, lines 32-33 and page 5, lines 19-28. The impermeable screen, as in the embodiment of figure 3, is not present in all embodiments. Document D39 further describes on page 5, lines 5-17 that, suitably, the capsule is made substantially or completely from biodegradable materials. Several materials are then cited, including polyhydroxybutyrate (PHB). This passage refers generally to the "capsule according to the present invention" without any particular clear and unequivocal indication that it relates to the body or the screen or both (nor is it specified whether the passage refers to all embodiments, including the ones with the optional impermeable screen, or not). There is moreover no indication or suggestion that all capsule components should be made of a single material, though the materials should all be "compostable and/or

- 18 - T 1688/15

recyclable". There is thus no clear and unambiguous disclosure as to which of the listed materials is used for the filtration sheet and which ones for the impermeable screen, much less that all components should be made of the same material, even if this paragraph is also to be read as referring to the screen. The only properties of the cited materials in that passage is that they are biodegradable, compostable or recyclable. The skilled person cannot therefore derive, in the opinion of the Board, from this description that polyhydroxybutyrate is used in D39 as the impermeable material for the screen 24. Thus the Board considers that D39 does not unambiguously disclose a material PHB that meets the limitation of the contested claim 1 to also be impermeable to water and oxygen.

- 7.6 The Board therefore concludes that the subject-matter of claim 1 of the second auxiliary request is new over the cited prior art in the sense of Article 54(2) EPC.
- 8. Second auxiliary request inventive step
- 8.1 In their written submissions the Appellant-Opponent challenged inventive step starting from D13 or D7 as closest prior art. At the oral proceedings before the Board they focused exclusively on a further attack starting from D39 as closest prior art.
- 8.2 The Board noted in its communication, that neither document (D13, D7) describes a PHB (polyhydroxybutyrate) or PHA (polyhydroxyalkanoate) material i.e. a biodegradable material as claimed forming wall means of the package, which material is impermeable to water and oxygen, see also interpretation of claim 1 above, point 7.1. As also

- 19 - T 1688/15

identified above for novelty, see point 7.5, claim 1 also differs from the embodiment of figure 3 of D39 by this same feature.

- 8.3 By the use of such a material for building the wall means of the package, a simpler structure with less layers, using a biodegradable wall, which is also suitable for longer shelf-time preservation of the product, can be achieved. The associated technical problem can thus be formulated as how to simplify a water and oxygen impermeable wall structure of a container as in D7, D13 or D39 and so reduce its manufacturing costs.
- 8.4 In this context the Appellant-Opponent cites common general knowledge. However, in the Board's opinion, the skilled person, when tasked with the general problem of cost reduction of the structures of either D7, D13 or D39, finds there a list of several different materials, see page 4, lines 24-26 in D13; page 5, lines 1-5 and claim 9 in D7 and page 5, lines 5-17 in D39. D7, in particular, neither mentions PHA nor microbial polyester. In the Board's opinion, and contrary to the submissions of the Appellant-Opponent, the skilled person does not find any particular motivation, hint or suggestion, either in the cited documents or from common general knowledge, to purposely select, as a matter of obviousness, either of the materials claimed, PHA or microbial polyesters, in order to specifically simplify the wall structure and reduce manufacturing costs. The Appellant-Opponent has also not provided any evidence or argument of an indication or hint that would suggest to the skilled person to specifically develop and apply that material for their oxygen and water barrier properties. In this respect, the listed materials in D13 that include PHA do not have the

- 20 - T 1688/15

required impermeability properties. As regards the teachings in D39, as discussed above for novelty under point 7.5, the cited paragraph on page 5, lines 5-17, neither suggests nor teaches any link between the cited PHB material and its possible use as an impermeable screen.

Therefore, in the Board's view, the skilled person, when confronted with the task of simplifying any of the impermeable wall structures of D7, D13 or D39, does not receive either from common general knowledge or elsewhere any specific teaching that polyhydroxybutyrates or microbial polyesters can be used to provide the water and oxygen impermeability, as claimed.

8.5 The Board thus concludes that the subject-matter of claim 1 according to the second auxiliary request involves an inventive step.

9. Conclusion

For the above reasons the Board holds that the claims as amended according to the second auxiliary request meet the requirements of the EPC. The Board is satisfied that the consequential amendments to the description bringing it into line with the amended claims are unobjectionable, and these were also not objected to by the Appellant-Opponent. The Board concludes that, taking into account the amendments made to the patent according to the second auxiliary request, the patent can be maintained as amended pursuant to Article 101(3)(a) EPC.

- 21 - T 1688/15

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 European patent No. 2234522 in the following version:

Claims:

Claims 1-10 of auxiliary request 2 as filed with letter of 21 March 2015 (received 21 March 2016)

Description:

Pages 1-26 as filed with letter of 21 March 2015 (received 21 March 2016)

Drawings:

Figures 1-23 as in the published patent specification.

The Registrar:

The Chairman:



G. Magouliotis

A. de Vries

Decision electronically authenticated