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Datasheet for the decision of 29 April 2010

Case Number: T 1332/09 - 3.2.04

Application Number: 06727328.4

Publication Number: 1865812

IPC: A47C 27/08

Language of the proceedings: EN

Title of invention:
Support apparatus with gel layer

Applicant:
Technogel Italia S.R.L.

Headword:
-

Relevant legal provisions:
EPC Art. 83, 113(2), 123(2)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
-

Keyword:
"Late-filed main and auxiliary requests - not clearly allowable - not admitted into the proceedings"

Decisions cited:
T 0087/05

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1332/09 **-** 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 29 April 2010

Appellant: (Applicant)
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Representative:
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Decision under appeal:
Decision of the Examining Division of the European Patent Office posted 23 December 2008 refusing European application No. 06727328.4 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: C. Scheibling
Members: A. de Vries
C. Heath

Summary of Facts and Submissions

I. This appeal is against the decision of the Examining Division dated 23 December 2008 to refuse the patent application. The Appellant's notice of appeal was received on 20 February 2009 and the appeal fee was paid simultaneously. The statement setting out the grounds of appeal was received on Monday 4 May 2009.

II. Oral proceedings took place on 29 April 2010 before the Board of Appeal.

The Appellant (applicant) requested that the decision under appeal be set aside and that a patent be granted on the basis of the set of claims according to the main request (filed as second auxiliary request with letter dated 26 April 2010) or to one of the first to third auxiliary requests filed during the oral proceedings before the Board.

He mainly argued as follows:

The description of the patent application discloses the components and the fillers which can be used to produce a gel according to the invention, therefore a skilled person would be able to carry it out.
The apparatus claimed in the main request defines a gel exhibiting hardness and a hysteresis within the restricted and more preferred ranges indicated in the description. It can further be derived from claim 3 as originally filed that a gel according to the invention always has to exhibit specific hardness and hysteresis in combination.

The first auxiliary request defines in six independent claims the specific values of the most important embodiments according to the invention. Since in this request each independent claim defines the apparatus with respect to one specific gel, more than one independent claim is necessary to cover the scope of the invention.
The second auxiliary request defines the gel with respect to even more restricted hardness and hysteresis ranges as disclosed by specific examples in the description.
The third auxiliary request defines the gel with respect to one single gel composition defined by its hardness and hysteresis disclosed in a specific example of the description.

III. Claim 1 of the main request reads as follows

"1. An apparatus for supporting at least a portion of the body thereon, said apparatus comprising a gel layer overlying one or more additional support layers, characterised in that said gel layer comprises a gel having a hardness in the range of about 2 kPa to about 25 kPa measured according to the method of ISO 3386-1 and wherein said hardness represents the force deflection of a 5 cm x 5 cm x 2.5 cm sample of said gel at 40% compression, exhibiting a hysteresis of about 30% to about 50%, and providing a cushioning effect while maintaining a degree of structural stability and support."

Claims 1 to 6 of the first auxiliary request read as follows

Claim 1

"1. An apparatus for supporting at least a portion of the body thereon, said apparatus comprising a gel layer overlying one or more additional support layers, characterised in that said gel layer comprises a gel having a hardness of about 4,4 kPa measured according to the method of ISO 3386-1 and wherein said hardness represents the force deflection of a cylindrical sample having a diameter of 5 cm and being 3 cm thick of said gel at 40% compression, exhibiting a hysteresis of about 45,7%, and providing a cushioning effect while maintaining a degree of structural stability and support."

Claim 2

"1. An apparatus for supporting at least a portion of the body thereon, said apparatus comprising a gel layer overlying one or more additional support layers, characterised in that said gel layer comprises a gel having a hardness of about 3,1 kPa measured according to the method of ISO 3386-1 and wherein said hardness represents the force deflection of a sample 5 cm wide x 5 cm long x 1.7 mm thick having four square projections arising from the top thereof, each being 2 cm wide x 2 cm long x 0.8 cm thick of said gel at 40% compression, exhibiting a hysteresis of about 54,5%, and providing a cushioning effect while maintaining a degree of structural stability and support."

Claim 3 differs from claim 1 in that the hardness is about 6 kPa and the hysteresis about 35,0%.

Claim 4

"1. An apparatus for supporting at least a portion of the body thereon, said apparatus comprising a gel layer overlying one or more additional support layers, characterised in that said gel layer comprises a gel having a hardness of about 7,6 kPa measured according to the method of ISO 3386-1 and wherein said hardness represents the force deflection of a 5 cm x 5 cm x 2.5 cm sample of said gel at 40% compression, exhibiting a hysteresis of about 37,4%, and providing a cushioning effect while maintaining a degree of structural stability and support."

Claim 5 differs from claim 1 in that the hardness is about 12 kPa and the hysteresis about 46,0%.

Claim 6 differs from claim 1 in that the hardness is about 9, 7 kPa and the hysteresis about 36,0%.

Claim 1 of the second auxiliary request reads as follows

"1. An apparatus for supporting at least a portion of the body thereon, said apparatus comprising a gel layer overlying one or more additional support layers, characterised in that said gel layer comprises a gel having a hardness of about 4,4 to about 12 kPa measured according to the method of ISO 3386-1 and wherein said hardness represents the force deflection of a cylindrical sample having a diameter of 5 cm and being 3 cm thick of said gel at 40% compression, exhibiting a hysteresis of about 35% to about 46%, and providing a cushioning effect while maintaining a degree of structural stability and support."

Claim 1 of the third auxiliary request reads as follows

"1. An apparatus for supporting at least a portion of the body thereon, said apparatus comprising a gel layer overlying one or more additional support layers, characterised in that said gel layer comprises a gel having a hardness about 4,4 kPa measured according to the method of ISO 3386-1 and wherein said hardness represents the force deflection of a cylindrical sample having a diameter of 5 cm and being 3 cm thick of said gel at 40% compression, exhibiting a hysteresis of about 45,7%, and providing a cushioning effect while maintaining a degree of structural stability and support."

Reasons for the Decision

1. The appeal is admissible.

2. *Admissibility of the requests*

2.1 The main request was filed two days before the oral proceedings and the first to third auxiliary requests were filed during the oral proceedings.

Consequently, they constitute amendments to the appellant's case in the meaning of Article 13(1) of the Rules of procedure of the Boards of Appeal (RPBA). This Article stipulates that "Any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion…" and further that this discretion "shall be

exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy".

2.2 One of the criteria frequently adopted by the Boards when exercising their discretion in admitting amendments filed shortly before or in the course of oral proceedings is whether or not good reasons exist for filing amendments at this stage of the procedure (which may be the case when amendments are occasioned by developments during the proceeding) and whether or not the new requests are clearly allowable under the EPC (see the Case Law of the Boards of Appeal, 5th edition, 2006, chapter VII.D.14.2.1 and 14.2.3) This means that it must be immediately apparent to the Board, with little or no investigative effort on its part, that the amendments successfully address the issues raised without giving rise to new ones (see T 0087/05, point 2).

2.3 In its communication annexed to the summons to oral proceedings, the Board inter alia raised the question of whether the invention was disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

The application relates to an apparatus comprising a gel. This gel is defined (see page 7, line 15 to page 8 line 11) as a mixture of one or more first polyols having hydroxyl numbers below 112, and one or more second polyols having hydroxyl numbers in the range of 112 to 600, wherein the weight ratio of the first polyols to the second polyols lies between 90:10 and 10:90, or of one or more polyisocyates, and a polyol

component consisting of a first component of one or more polyols having hydroxyl numbers below 112, and a second component of one or more polyols having hydroxyl numbers in the range of 112 to 600, and optionally a catalyst for the reaction between isocyanate and hydroxyl groups, and optional fillers and/or additives which are known from polyurethane chemistry, wherein the weight ratio of first component to the second component lies between 90:10 and 10:90.

The polyol component for producing the gel preferably consists of one or more polyols having a molecular weight between 1,000 and 12,000 and an OH number between 20 and 112, wherein the product of the functionalities of the polyurethane- forming components is at least 5.2, and the isocyanate characteristic lies between 15 and 60.

As isocyanates for gel production, those of the formula Q(NCO)n may preferably be used, wherein n represents 2 to 4 and Q denotes an aliphatic hydrocarbon radical having 6 to 18 C atoms, a cycloaliphatic hydrocarbon radical having 4 to 15 C atoms, or an aromatic hydrocarbon radical having 8 to 15 C atoms. The isocyanates may be used in pure form or in the form of the conventional isocyanate modifications, such as urethanisation, allophantisation or biuretisation.

As possible filler material the application proposes (page 15, line 24 to page 16 line 12) cork pieces, cork flour, wood pieces, wood chips, sponge, natural fibers (e.g., cotton, wool, etc), minerals (e.g., mica, or other silicates, or other metal oxides, such as aluminates), pumice, and glass (including fibers, beads, etc.), synthetic fibers, synthetic microspheres, and various other synthetic materials, foam flakes, textile fibers, textile pieces, paraffins, hollow

spheres, synthetic microspheres, active agents, nanoparticles, and mixtures thereof. The content of filler present in the gel being of about 5% to 95% of the filled gel, on a volume basis.

2.4 The gel of the apparatus as claimed is solely defined by its hardness and hysteresis characteristics. The application discloses no specific example of a gel composition i.e. a specific mixture of the indicated components which would result in a gel exhibiting the claimed mechanical characteristics.

The Appellant argued that the skilled person would be able to produce a gel according to the invention on the basis of the components listed in the application and by subsequently testing it, so as to determine whether its mechanical characteristics lie in the claimed ranges.

This means that the skilled person who tries to carry out the invention will have to determine by trial and error a gel composition exhibiting the claimed characteristics by varying a plurality of parameters, including the particular components to be used, the proportions of each component, the kind of filler material to be added, the proportions of the filler with respect to the gel and the size of the filler particles. Since as mentioned in the application each parameter can vary in large proportions, the number of possible combinations is countless. Therefore, the Board holds that this would amount to an undue burden for the skilled person.

2.5 None of the requests on file clearly overcomes the aforementioned objection based on insufficient disclosure of the invention (Article 83 EPC) and thus none of them is clearly allowable.

2.6 Furthermore, all requests give rise to new objections.

2.6.1 Claim 1 of the main request requires that the gel exhibits in combination a hardness of about 2 kPa to about 25 kPa and a hysteresis of about 30% to 50%.

The Appellant contended that these numerical values are disclosed on page 10, line 25 and page 12, line 2 of the original description and that claim 3 as originally filed shows that both characteristics are to be considered in combination.

However, the corresponding passages of the description read as follows "A gel useful according to the invention has a low measurable hardness… In one embodiment, the gel used in the invention has a measurable hardness in the range of about 0.5 kPa to about 50 kPa. According to further embodiments, the gel has a hardness in the range of about 1 kPa to about 40 kPa, about 1.5 kPa to about 30 kPa, or about 2 kPa to about 25 kPa." and "Gels useful according to the present invention, being highly elastic, do not suffer from such a drawback… In one embodiment, the gel used in the invention has a measurable hysteresis in the range of about 15% to about 80%. According to further embodiments, the gel has a hysteresis in the range of about 20% to about 70%, about 25% to about 60%, or about 30% to about 50%."

This means that gels exhibiting hardness in the range of about 2 kPa to about 25 kPa pertain to another embodiment than gels exhibiting hardness in the range of about 0.5 kPa to about 50 kPa.

Claim 3 (in combination with claim 1) as originally filed discloses a gel with a hardness of about 0,5 kPa to about 50 kPa and a hysteresis of about 25% to 60%. However, since a gel with a hardness of about 2 kPa to about 25 kPa necessarily pertains to another embodiment than the gel disclosed in claim 3, this claim cannot serve as basis for the combination of hardness and hysteresis as claimed in claim 1 of the actual main request.

Thus, claim 1 of the main request does not meet the requirements of Article 123(2) EPC.

2.6.2 Claim 1 of the first auxiliary request comprises six independent claims. Accordingly, it is questionable whether the requirement of conciseness of Article 84 EPC, and the principles of Rule 43(2) EPC concerning multiple independent claims in the same category are met.
Furthermore, the numerical values claimed in the independent claims are taken from table 1 (page 21) of the application. Claim 5 is based on example 4 and claim 6 is based on example 5 of table 1. However examples 4 and 5 of table 1 relate to gels comprising filler material in the form of cork and microspheres respectively. Claims 5 and 6 leave open whether the gel comprises filler material or not. The claimed subject-matter therefore constitutes an intermediate

generalisation with respect to table 1 and thus does not meet the requirements of the Article 123(2) EPC.

2.6.3 Claim 1 of the second auxiliary request requires that the gel exhibits a hardness of about 4,4 kPa to about 12 kPa and a hysteresis of about 35% to 46%. However, none of the specific examples of table 1 discloses a gel exhibiting in combination a hardness of about 4,4 kPa and a hysteresis of about 35%. The claimed subject-matter therefore constitutes an intermediate generalisation with respect to table 1 and therefore the requirements of Article 123(2) EPC are not fulfilled.

2.6.4 Claim 1 of the third auxiliary request requires that the gel exhibits a hardness of about 4,4 kPa and a hysteresis of about 45,7%. These values are disclosed in example 3 of table 1 of the description. However, there is no indication in the whole application why out of the 11 examples of gels useful according to the invention presented in table 1 especially example 3 should constitute a preferred embodiment of the invention, such that it can be claimed in isolation of all other examples and involve an inventive step. Therefore, claim 1 of the third auxiliary request does not prima facie meet the requirements of the EPC.

2.7 Since none of the late filed requests clearly overcomes the objection of lack of disclosure of the invention and each of them gives rise to new objections, the main request and the first to third auxiliary requests are not admitted into the proceedings.

3. *Article 113(2) EPC*

In the present case the Appellant has filed shortly before and in the course of oral proceedings new requests and has withdrawn all previous requests. Since the Board does not admit the new requests, there is no longer a valid text submitted by the Appellant upon which the European Patent Office can decide as stipulated by Article 113(2) EPC. Such a valid text is a fundamental procedural prerequisite for the Board to be able to review the decision under appeal. Accordingly, in the absence of a valid text, the appeal must fail.

Order

For these reasons it is decided that:

The appeal is dismissed.

The registrar: The Chairman:

G. Magouliotis C. Scheibling