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D E C I S I O N
of 10 March 2005

Case Number: T 0438/03 - 3.2.7

Application Number: 95118777.2

Publication Number: 0714832

IPC: B65D 1/02

Language of the proceedings: EN

Title of invention:
Mineral water bottle without off-taste

Patentee:
AMCOR Limited

Opponent:
Rexam AB

Headword:
-

Relevant legal provisions:
EPC Art. 100(b), (c), 111(1)

Keyword:
"Interpretation of features"
"Extension of subject-matter (no)"
"Sufficiency of disclosure (yes)"

Decisions cited:
-

Catchword:
-

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Case Number: T 0438/03 - 3.2.7

D E C I S I O N
of the Technical Board of Appeal 3.2.7
of 10 March 2005

Appellant: (Proprietor of the patent)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 19 February 2003 revoking European patent No. 0714832 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: P. A. O'Reilly
Members: H. E. Felgenhauer
E. Lachacinski

Summary of Facts and Submissions

I. The appellant (patent proprietor) filed an appeal against the decision of the opposition division revoking the European patent No. 0 714 832.

II. Opposition was filed against the patent as a whole based on Article 100(a), (b) and (c) EPC (lack of novelty and of inventive step, insufficient disclosure and extended subject-matter).

According to the decision under appeal the patent has been revoked solely based on the grounds of opposition according to Article 100(b) and (c) EPC.

Having regard to the ground of appeal with respect to Article 100(c) EPC according the decision under appeal claims 2, 8 and 9 as granted have been amended such that the subject-matter of the European patent extends beyond the content of the application as filed.

Feature b) of claim 8 "introducing the preform in a mould" and the part of feature b) of claim 9 "introducing the injection moulded preform in a mould ..." have been considered as being the result of a selection from the alternatives of introducing the preform into the mould or moving the mould towards a non-movable preform. According to the decision these features result from the first alternative having been selected excluding the second one and it has been concluded that the application as filed does not provide a basis for such a selection.

With respect to the terms "heat-setting" and "heat set process" used in claims 2 and 9, respectively, it has been concluded that, although being further defined by the feature following immediately each one of these terms, these terms are not restricted to these definitions but can have a broader meaning, as can be derived from the meanings given to the terms "heat set process" or "thermosetting" in document D7.

The feature "blow-moulding the preform" followed by the feature "keeping the wall of the container in contact with ..." of claim 9 has been considered as extending beyond the content of the application as filed, since within this application the level of pressure is not identified as being one leading to the wall of the container being kept in contact with the mould for an extended period of time.

With respect to the ground of opposition according to Article 100(b) EPC the feature "that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C" has been considered as being the result of properties inherent to the material of the container, which does not constitute per se a property of the container. This feature has then been considered as being merely an advantage, resulting from the properties of the container itself.

Disregarding this feature together with the features relating to the production process defined in claims 1 to 4 these claims have been considered as not being novel with respect to document D1.

From this it has been concluded that the invention is to be found in the method for manufacturing a container as defined in claim 8 and 9. Concerning these methods it has been found that they are not exemplified at all in the description and furthermore that values for the different cited parameters have not been disclosed. The only exception is the feature defining that the production process allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75° C to 85° C. This feature was considered as an advantage and not a structural or process feature. Based on these considerations it has been concluded that the European patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

III. Of the documents considered in the opposition proceedings the following documents are referred to in the present decision:

D1: CH-A-684 537

D4: EP-A2-0 425 360

D5: EP-B1-0 237 459

D6: EP-B1-0 442 836

D7: Brochure SIDEL "Thermosetting", "Machines for the manufacture of high-performance bottles for pasteurization, hot-fill and refill purposes" dated 09/93.

IV. The appellant requested that the decision under appeal be set aside and that the patent be remitted to the first instance for further prosecution on the basis of the patent as granted as main request or on the basis of the auxiliary request filed in oral proceedings before the opposition division.

The respondent (opponent) requested the appeal be dismissed.

V. The independent claims of the patent as granted read as follows:

"1. Container consisting substantially of PET, being suitable for mineral water, by

(a) comprising an additive in the wall of the container which holds back or binds the acetaldehyde (AA) contained in the PET;
characterized in that
(b) the container being manufactured from a preform in a production process that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C, said production process comprising a two step blowing/shrinking that enlarges the preform in the first step to an intermediate container being of larger size than the final container, a shrinkage based on heat influence and a blow-moulding of the shrunk container to its final size."

"2. Container consisting substantially of PET, being suitable for mineral water, by

(a) comprising an additive in the wall of the container which holds back or binds the acetaldehyde (AA) contained in the PET;
characterized in that
(b) the container being manufactured from a preform in a production process that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C, said production process comprising a heat-setting in which the wall of the container becomes heat-stable when being in a heated or hot mold under maintained pressure for an extended period of time."

"3. Container consisting substantially of PET, being suitable for mineral water, by

(a) comprising an additive in the wall of the container which holds back or binds the acetaldehyde (AA) contained in the PET;
characterized in that
(b) the container being manufactured from a preform in a production process that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C, said production process comprising an adding of a small amount of PEN to said PET, making the container capable for washing at the elevated temperature without noticeable changing its size."

"4. Container consisting substantially of PET, being suitable for mineral water, by

(a) comprising an additive in the wall of the container which holds back or binds the acetaldehyde (AA) contained in the PET;
characterized in that
(b) the container being manufactured from a preform in a production process that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C, said production process comprising the introducing of a middle layer, neighbored by PET-layers, the middle layer being a heat-stable material as a stabilizing layer."

"8. Method for manufacturing a container according to claim 1, said method comprising the steps of

(a) injection moulding a preform of substantially PET with an additive in the container wall forming portion of the preform, which additive holds back or binds the acetaldehyde (AA) contained in the PET;
(b) introducing the preform in a mould;
(c) blow moulding the container in a two step blowing/shrinking process, by

- enlarging the preform in the first step to an intermediate container being of larger size than the final container,
- shrinking the intermediate container based on heat influence,

- and blow-moulding the shrunk container to its final size, thus allowing the container to be washed without noticeable shrinkage at an elevated temperature."

"9. Method for manufacturing a container according to claim 2, said method comprising the steps of

(a) injection moulding a preform of substantially PET with an additive in the container wall forming portion of the preform, which additive holds back or binds the acetaldehyde (AA) contained in the PET;
(b) introducing the injection moulded preform in a mould and heating the mould;
(c) blow moulding the container in a heat set process, by
- blow-moulding the preform under maintained pressure to a final container size in the hot mould;
- keeping the wall of the blown container for an extended period of time in contact with the inner surface of the hot mould, thus becoming heat-stable and allowing the final container to be washed without noticeable shrinkage at an elevated temperature."

VI. The appellant argued in written and oral submissions essentially as follows:

(i) Feature b) of claim 8 "introducing the preform in a mould" and the part of feature b) of claim 9 "introducing the injection moulded preform in a mould ..." are followed in each case by feature c) defining the process in which a container is made out of a preform. This process, which is defined as blow moulding, implies that in order for it to be carried out a mould has to be

present and that the preform has to be in this mould while the blow moulding is performed. This implies necessarily that the preform has to be situated in the mould while the container is formed from the preform via blow moulding. Feature b) thus defines a generally known step inherent to any blow moulding process, which is independent of the manner in which a preform gets into a mould. Furthermore this feature cannot be considered as adding any technical information to the claims concerned. This can easily be verified, since reading the technical teachings defined by claims 8 and 9 without feature b) does not alter the methods defined by these claims.

(ii) The terms "heat-setting" and "heat set process" used in claims 2 and 9, respectively, have been inserted during the examination proceedings in response to the communication of the Examining Division. The Examining Division asked for the method steps defined by features a) to d) of claim 4 of the application as filed to be introduced as well as a reference to the term "heat-set" with respect to features a) and b) of claim 4 of the application as filed. The terms concerned do not add any technical information to the actual processes as disclosed by features a) and b) of claim 4 of the application as filed. Moreover these terms can only be interpreted based on the disclosure of the patent in suit which clearly excludes an understanding of these terms based on other documents, like e.g. document D7.

(iii) The feature "blow-moulding the preform" followed by the feature "keeping the wall of the container in contact with ..." of claim 9 is based on feature b) of claim 4 of the application as filed. From this feature and the fact, that the container is manufactured from a preform, as defined by feature b) of claim 1 of the application as filed, and thus by blow moulding it is directly and unambiguously derivable that under the maintained pressure the wall of the blown container is kept in contact with the inner surface of the hot mould as defined by the two last features of claim 9.

(iv) With respect to the ground of opposition according to Article 100(b) EPC the feature "that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C" of claims 1 - 4, which, without the temperature range, is also present in claims 8 and 9, needs to be considered as a structural feature of the container defined by claims 1 to 4 or the container to be manufactured according to the method of claims 8 or 9, since whether or not a container comprises such a feature can easily be verified by exposing it to the washing at an elevated temperature and by observing its shrinkage. Consequently this feature cannot be considered as merely relating to an advantage resulting from the properties of the container itself.

The group of inventions as defined by the claims resides in the container according to claims 1 to

4 and in methods for manufacturing containers according to claims 8 and 9. This group of inventions is essentially based on the combination of two known steps. According to the first step the container consists substantially of PET, which, as defined by feature a) of claims 1 to 4, comprises an additive in the wall of the container which holds back or binds the acetaldehyde (AA) contained in the PET. According to the second step the container is manufactured from a preform by a known manufacturing process such that the container can be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C as defined by feature b) of claims 1 to 4. Consequently, since the invention resides in the combination of two steps, each by itself being well known to the person skilled in the art, the European patent discloses the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

VII. The respondent argued in written and oral submissions essentially as follows:

(i) The reasons given in the decision under appeal correctly indicate that the features concerned of claims 2, 8 and 9 lead to the European patent extending beyond the content of the application as filed and that the patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out.

(ii) Feature b) of claim 8 "introducing the preform in a mould" and the part of feature b) of claim 9 "introducing the injection moulded preform in a mould ..." clearly define that it is the preform which is moved into a mould. Such an interaction of a preform and a mould is not disclosed in the application as filed. Thus concerning this feature the ground of opposition according to 100 c) EPC applies.

(iii) The terms ""heat-setting" and "heat set process" used in claims 2 and 9 respectively are not restricted to the meaning given by the feature immediately following each one of these expressions. These terms thus can be understood by the person skilled in the art as having broader meanings than the one disclosed in the application as filed. According to document D7 the terms "heat set process" or "thermosetting" are used with respect to processes including the step of cooling the interior of a container which has not been disclosed in the application as filed. Furthermore the terms used in claims 2 and 9 are not alike which could be understood as implying that in each case a different step is referred to.

(iv) The feature "blow-moulding the preform" followed by the feature "keeping the wall of the container in contact with ..." of claim 9 extends beyond the content of the application as filed. In this application it is nowhere disclosed that the pressure maintained is such that the wall of the

container is kept in contact with the inner surface of the mould.

(v) Concerning the ground of opposition according to Article 100(b) EPC the feature "that allows the container to be washed without noticeable shrinkage at an elevated temperature in the range of 75°C to 85°C" has on the one hand to be considered as contributing to the definition of the structure of the container. On the other hand from the application as filed as well as the patent in suit it is has to be concluded that the manner in which a container having such a structural property is manufactured is not disclosed. Consequently the ground of opposition according to Article 100(b) EPC applies.

VIII. In a communication dated 26 November 2004 the Board referred to the essential issues it considered necessary to be considered at the oral proceedings indicating, that if it were to be found that the grounds of appeal according to Article 100(b) and (c) EPC did not prejudice maintenance of the patent, it appeared to be appropriate to remit the case to the first instance for examination of the grounds of opposition according to Article 100(a) EPC (lack of novelty and inventive step).

Reasons for the Decision

1. *Ground of opposition according to Article 100(c) EPC*

Before going into detail with respect to the features of claims 2, 8 and 9 which allegedly extend beyond the content of the application as filed, the Board wishes to note that this aspect is closely related to the manner in which the features concerned are understood by the person skilled in the art. Thus in the following for each feature concerned it will be examined first which meaning this feature has for the person skilled in the art followed by an examination of whether or not in this understanding the feature is disclosed by the application as filed.

1.1 Claims 8 and 9 comprise as features b) the feature "introducing the preform in a mould" and the feature "introducing the injection moulded preform in a mould and heating the mould", respectively.

According to the appellant these features do not add any technical information to the claims concerned and merely reflect the fact, that in order to carry out the blow moulding referred to in the application as filed as the method for manufacturing containers, the preform has to be in a mould such that this blow moulding can be carried out.

According to the respondent and the decision under appeal (reasons No. 4.2) features b) have to be understood as defining the precise manner in which a preform and a mould are brought into a position enabling them to interact in a blow moulding process.

Thus these features indicate that it is the preform which is introduced into the mould, as compared to a method step in which a mould is moved to take up a preform.

The Board cannot follow the argument or reasoning of the respondent. In the application as filed it is consistently referred to containers being manufactured by blow moulding (cf. e.g. column 1, lines 43 - 47; column 2, lines 34 - 38; 42 - 51) for which a definition is given (column 2, lines 34 - 38). Such a process is explicitly referred to in claim 4 of the application as filed, feature a), which is the basis for claim 8 of the patent in suit. Implicitly blow moulding is also referred to in feature b) of claim 4 as filed, which forms the basis for claim 9 of the patent in suit. In either case it is not mentioned in which manner the preform gets into the mould.

On the basis of this disclosure the Board agrees with the appellant that for the process of blow moulding it suffices that the preform is in a mould, whereas it is immaterial for the process to be carried out how the preform gets into the mould. Consequently features b) of claims 8 and 9 are considered as not adding any new information to the process of blow moulding as disclosed in the application as filed. Thus these features do not lead to subject-matter extending beyond the content of the application as filed. For completeness sake it may be indicated that considering the literal meaning of these features it cannot be concluded that the expression "introducing" necessarily has to be interpreted in its given context in features b) in the narrow sense, according to which the preform

is moved into the mould. On the contrary in its literal meaning these features more likely have to be understood as merely defining that prior to blow moulding according to feature c) of claim 8 and 9, respectively, the preform has to be in the mould.

1.2 Concerning the part of feature b) of claim 2, according to which "a heat-setting in which the wall of the container becomes heat-stable when being in a heated or hot mold under maintained pressure for an extended period of time" and the part of feature c) of claim 8 referring to "blow moulding the container in a heat set process" it is disputed by the parties which meaning the person skilled in the art will derive from the expressions "heat setting" and "heat set process". According to the appellant these expressions have been brought into the description of the patent in suit as generic terms for the specific processes defined in claims 2 and 9 by the features immediately following these expressions. Thus these expressions do not have any particular technical meaning attached to them going beyond the processes defined in claims 2 and 9. According to the respondent the expressions concerned, which are differently formulated in claims 2 and 9, must be considered independently of the processes defined immediately following these expressions. Consequently meanings generally associated with these expressions must be taken into account. Considering that document D7 refers, according to its title, to "thermosetting" it must be concluded that such thermo- or heat setting can comprise a cooling of the container (cf. D7, paragraph 4.). Consequently, since the general meaning of the expressions "heat setting" and "heat set process" includes a cooling step and since such a

cooling step is not disclosed in the application as filed, introduction of these expressions leads to the subject-matter of claims 2 and 9 extending beyond the content of the application as filed.

The Board cannot follow the reasoning of the decision under appeal (reasons No. 4.3) and the corresponding arguments of the respondent. The reason being that it is generally accepted that it is the application or patent in suit as such which is considered in the interpretation of claims and the respondent failed to convince the Board that for the patent in suit, by way of exception, further literature, such as document D7, needs to be considered. Applying the general rule it is evident that the insertion of the expressions concerned does not add any technical information to the features of claims 2 and 9, which, immediately following these expressions, not only define the processes referred to by these expressions but also limit their meaning to the corresponding method steps defined by features a) and b) of claim 4 of the application as filed originally.

The presence of the expressions "heat setting" and "heat set process" of claims 2 and 9, respectively, thus does not lead to subject-matter extending beyond the content of the application as filed.

1.3 According to the appellant the portion of feature c) of claim 9 "keeping the wall of the blown container for an extended period of time in contact with the inner surface of the hot mould" does not add to the disclosure given by feature b) of claim 4 of the application as filed, since it is evident that

manufacturing a container within a mould requires the wall of the container to come into contact with the inner surface of the mould for it to be shaped. Furthermore, since the last feature of claim 9 of the patent in suit as well as feature b) of claim 4 of the application as filed define the same, namely that after having been shaped the wall of the container is held in contact with the mould, or more precisely the inner surface of the mould, to make it heat-stable.

According to the respondent from feature b) of claim 4 of the application as filed it cannot be derived that the wall of the container is kept in contact with the inner surface of the mould such that this feature leads to claim 9 of the patent in suit comprising subject-matter extending beyond the content of the application as filed originally.

The Board cannot follow the argument of the respondent since from the wording of feature b) of claim 4 of the application as filed originally it is evident that the method step concerned affects the wall of a container, which has been formed by contacting the mould prior to this step. Concerning the step itself it is defined that pressure is maintained for an extended period of time. According to the Board this implies that a certain pressure, namely the one forming the wall of the container by it being brought into contact with the inner surface of the mould, is maintained, thus also keeping the wall in contact with the mould for an extended period of time. The features of claim 9 defining the heat set process thus explicitly define what implicitly has been disclosed by feature b) of claim 4 of the application as filed. These features

thus do not lead to subject-matter extending beyond the content of the application as filed.

1.4 Since none of the features allegedly extending the subject-matter of the claims of the patent in suit beyond the content of the application as filed, and since the Board has not found any other features extending beyond the content of the application as filed, the Board is satisfied that the ground of opposition according to Article 100(c) EPC does not succeed.

2. *Ground of opposition according to Article 100(b) EPC (insufficient disclosure)*

2.1 The Board notes that it is now undisputed, that the part of feature b) of each of claims 1 - 4, according to which the container is washable without noticeable shrinking at an elevated temperature in the range of 75°C to 85°C, defines as a property of the container a structural feature of it. It thus does not merely define an advantage as assumed in the contested decision (reasons No. 6.).

With respect to the contested decision the Board further notes that according to Article 100(b) EPC it needs to be determined with respect to the invention, namely, according to the jurisprudence of the Boards of Appeal, the invention defined in the claims, whether or not the European patent gives a disclosure sufficiently clear and complete for it to be carried out. Consequently, with respect to the ground of opposition according to Article 100(b) EPC the question of whether the subject-matter of the claims defining the invention

is novel or not (cf. the contested decision, reasons No. 6.) is of no relevance.

The appellant's argument in respect to sufficiency of disclosure is that according to the invention two known elements are combined, namely concerning the material of the containers the use of ones consisting substantially of PET, which according to feature a) of claims 1 to 4 comprise an additive in the wall of the container which holds back or binds the acetaldehyde (AA) contained in the PET, and concerning the manufacture of the containers the use of known methods according to features b) of claims 1 to 4 and according to claims 8 and 9. In support of it's allegation that the manufacturing methods are known ones, the appellant referred to manufacturing processes for containers of the kind concerned disclosed in documents D1, D4, D5, D6 and D7. Since it remained undisputed that these documents indeed disclose blow moulding manufacturing processes for containers consisting substantially of PET there is no need to consider these documents in detail.

According to the respondent tests performed by the respondent to obtain containers as defined by claims 1 to 4 using the methods as defined by claims 8 and 9 failed to lead to containers having the washability as defined by the first part of features b) of claims 1 to 4. The respondent however was not able to provide evidence in support of this allegation.

The Board thus concludes that, with no proof having been given in support of the contrary, the ground of opposition according to Article 100(b) EPC does not

succeed, since the invention as claimed by claims 1 to 4 and claims 8 and 9 is defined as the combination of two elements, each of them being known as such (cf. patent in suit, column 2, lines 6 - 25) which leads to the combination being disclosed in a manner sufficiently clear and complete that it can be carried out by the person skilled in the art.

3. Since the contested decision concerned only the grounds of opposition according to Article 100(b) and (c) EPC, the Board exercises its discretionary power according to Article 111(1) EPC to remit the case to the first instance for the patent in suit to be examined with respect to the remaining grounds of opposition according to Article 100(a) EPC (lack of novelty and inventive step), which so far have not been considered. The Board thus follows a request of the appellant while the respondent did not object to the remittal of the case.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the first instance for further prosecution.

The Registrar: The Chairman:

G. Röhn P. O'Reilly