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**Datasheet for the decision
of 8 April 2016**

Case Number: T 1752/15 - 3.2.07

Application Number: 07792743.2

Publication Number: 2058239

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Title of invention:
BOTTLE MADE OF SYNTHETIC RESIN

Applicant:
Yoshino Kogyosho Co., Ltd.

Headword:

Relevant legal provisions:
EPC Art. 123(2)

Keyword:
Amendments - allowable (no)

Decisions cited:
T 1704/06

Catchword:



Beschwerdekammern
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European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1752/15 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 8 April 2016

Appellant: Yoshino Kogyosho Co., Ltd.
(Applicant) No. 2-6, Ojima 3-chome,
Koto-ku
Tokyo 136-8531 (JP)

Representative: Gray, James
Withers & Rogers LLP
4 More London Riverside
London SE1 2AU (GB)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 26 March 2015
refusing European patent application No.
07792743.2 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman H. Meinders
Members: V. Bevilacqua
G. Weiss

Summary of Facts and Submissions

- I. The appeal lies against the decision refusing European application 07 792 743.2 because of a lack of compliance of the requests submitted before the examining division with the requirements of Article 123(2) EPC.
- II. With its statement setting out the grounds of appeal the appellant re-submitted the main request on the basis of which the appealed decision was taken, together with two new auxiliary requests (first and second auxiliary request).
- III. With a communication annexed to a summons to oral proceedings scheduled for 8 April 2016 the Board presented its preliminary and non-binding opinion according to which the requirements of Article 123(2) EPC were not satisfied by the subject-matter of claim 1 of the main request, as well as by the subject-matter of claims 2 and 3 of the first auxiliary request and of claims 1, 2 and 3 of the second auxiliary request.
- IV. With letter dated 4 March 2016 the appellant informed the Board that he will not attend oral proceedings, submitted a third and a fourth auxiliary request and requested to set aside the decision under appeal and to grant the patent on the basis of one of the requests.

The requests were confirmed with the letter dated 4 April 2016.

- V. The text of claim 1 of the **main** request is as follows (the amendments over claim 1 as originally filed are

respectively in bold or struck through, emphasis was added by the Board):

"A synthetic resin bottle (1) having a mouth portion (2), a shoulder portion (3), a body portion (4) and a bottom portion (5) in which an amorphous carbon film (7) is deposited on at least inner surfaces (f3,f4,f5) of the shoulder portion (3), the body portion (4) and the bottom portion (5), ~~wherein~~ **characterized in that** the amorphous carbon film (7) on the mouth portion (2) and the shoulder portion (3) is deposited so that the thickness thereof is not more than 1.8 times the thickness at a position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal,

and that the thickness of the amorphous carbon film (7) at a height position where a distance in the direction toward the mouth portion (2) along a bottle axis (O) from the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal is 80% of the height of the shoulder portion (3) along the bottle axis (O) is less than 1.0 times the thickness at the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal."

The text of claim 1 of the **first auxiliary** request is as follows (the amendments over claim 1 as originally filed, are respectively in bold or stroke through, emphasis added by the Board):

"A synthetic resin bottle (1) having a mouth portion (2), a shoulder portion (3), a body portion (4) and a bottom portion (5) in which an amorphous carbon film (7) is deposited on at least inner surfaces (f3,f4,f5) of the shoulder portion (3), the body portion (4) and the bottom portion (5), ~~wherein~~ **characterized in that** the

amorphous carbon film (7) on the mouth portion (2) and the shoulder portion (3) is deposited so that the thickness thereof is not more than 1,8 times the thickness at a position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal,

and wherein in a region where a height position of the shoulder portion (3) in the direction toward the mouth portion (2) along the bottle axis (O) from the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal is within an area having a height not more than 70% of the height of the shoulder portion (3) along the bottle axis (O), the amorphous carbon film (7) on the shoulder portion (3) within the above range of height position is formed so that the thickness thereof is not more than 1.2 times the thickness at the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal."

The text of claim 2 of the **first auxiliary request** is as follows:

"The synthetic resin bottle (1) according to claim 1, characterized in that the thickness of the amorphous carbon film (7) at a height position where a distance in the direction toward the mouth portion (2) along a bottle axis (O) from the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal is 80% of the height of the shoulder portion (3) along the bottle axis (O) is 0.773 times or less the thickness at the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal."

The text of claim 3 of the **first auxiliary request** is as follows:

"The synthetic resin bottle (1) according to claim 1 or 2, wherein the thickness of the amorphous carbon film (7) decreases along the bottle axis (0) from the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal toward the mouth portion (2)."

The text of claim 1 of the **second auxiliary** request corresponds to the text of claim 1 of the first auxiliary request, with the addition of the following features:

"and in which the height of the shoulder portion (2) is 35 mm."

The text of claims 2 and 3 of the **second auxiliary request** respectively corresponds to the text of claim 2 and 3 of the first auxiliary request.

The text of claim 1 of the **third auxiliary request** corresponds to the text of claim 1 of the first auxiliary request.

The text of claim 2 of the **third auxiliary request** is as follows:

"The synthetic resin bottle (1) according to claim 1, characterized in that the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal is located at the border between the shoulder portion (3) and the body portion (4)."

The text of claim 1 of the **fourth auxiliary request** corresponds to the text of claim 1 of the first auxiliary request.

The text of claim 2 of the **fourth auxiliary request** is as follows:

"The synthetic resin bottle (1) according to claim 1, characterized in that the height of the shoulder portion(3) between the mouth portion (2) and the body portion (4) is 35 mm."

VI. The statement setting out the grounds of appeal contains, insofar as relevant to the present decision, the following arguments.

The appealed decision is based on the wrong assumption that the feature of claim 1 of the main request according to which

"the thickness of the amorphous carbon film at a 80% height of the shoulder portion is less than the thickness at the position at the basis of the shoulder portion"

extends beyond the content of the application as filed.

This feature is however directly and unambiguously derivable by a skilled person from the examples provided in Table 2 and the corresponding passages of the description of the application as originally filed.

This is because the description of a bottle having a shoulder portion with a height of 35 mm is merely an example of how the invention may be applied, and a person skilled in the art, being familiar with bottles in a range of sizes, would be able to generalize this teaching and apply it to any shoulder and bottle height.

The additional features of claim 1 of the first auxiliary request are based on paragraphs [8] and [9] of the patent application as filed.

The additional features of claim 1 of the second auxiliary request are implicitly disclosed in the patent application as filed.

VII. With the communication annexed to the summons to oral proceedings the Board questioned the compliance of claim 1 of the main request with the requirements of Article 123(2) EPC on the following grounds:

"2. Main request - Amendments

The Board is of the preliminary opinion that the features added to claim 1 of the main request contravene the requirements of Article 123(2) EPC.

2.1 Claim 1 requires that the thickness of the amorphous carbon film at a particular height position (where a distance in the direction toward the mouth portion along a bottle axis from the position at which the inner diameter of the shoulder portion is maximal is 80% of the height of the shoulder portion along the bottle axis), corresponding to the Shoulder-I position mentioned at table 2 and shown as y1 in figure 6 is less than the thickness at the position at which the inner diameter (Dmax) of the shoulder portion (3) is maximal.

This feature is present in three of the four examples shown at table 2.

The appellant argues that this characteristic taken from these working examples may (and actually would

inevitably) be combined by a skilled person with other features disclosed in a more general context without creating an objectionable intermediate generalisation.

This is because the description of a bottle having a shoulder portion with a height of 35 mm is merely an example of how the invention may be applied, and a person skilled in the art, being familiar with bottles in a range of sizes, is able to apply the teachings of the present application to various shoulder and bottle heights.

2.2 The Board disagrees.

2.2.1 Under Article 123(2) EPC this amendment would only be admissible if the skilled person would recognise without any doubt from the application as filed that there is a specific teaching related to this "reduced thickness at exactly this 80% shoulder height ("Shoulder-I") which further can be applied directly and unambiguously in a more general context, and that this reduced thickness is not closely related to the other characteristics of the particular embodiments of table 2 (see Case Law of the Boards of appeal of the European Patent Office, 7th Edition 2013, II.E.1.2).

2.2.2 This is, in the Board's preliminary opinion, clearly not the case.

There is no indication in the application as originally filed relating the relation between the thickness at the basis of the shoulder (Dmax) and the thickness at 80% height to a particular effect.

The teaching given in the passages indicated by the appellant is rather that, with the same bottle shape

and size and the same coating conditions (see page 10, lines 24-32), the thickness at a particular shoulder height is strongly dependent on the insertion depth of the coating nozzle (which therefore appears to be an essential feature).

Looking at table 2 the Board also sees that there is no clear link between shoulder height and film thickness, because in all the three examples the thickness changes in both directions along the vertical axis, and reaches its maximum value at different levels of the shoulder, depending on the insertion depth of the coating nozzle.

As there is no clear relation, for a given bottle type, given coating conditions and a given nozzle insertion between the location on the shoulder height and film thickness, the Board does not see how a person skilled in the art would be able to achieve the same relation of film thicknesses to location on the shoulder height by simply scaling proportionally and linearly the insertion depth with reference to the percentage increase or decrease in height of the shoulder portion of the examples provided in Table 2, as the appellant argues.

This is particularly true because the skilled person is aware that small changes in coating conditions and in the shape of the surfaces to be coated also play an important role in determining the uniformity of the film thickness, such that the feature of the film thickness at 80% shoulder height is inextricably linked also with these conditions.

The Board is therefore of the preliminary opinion that this is the typical case in which **it is not allowable**

to base an amended claim on the extraction of isolated features from a specific embodiment in the description.

Such an amendment is clearly directed at an undisclosed combination of features as, for example, a bottle with a film thickness which is linearly diminishing with shoulder height is within the terms of the amended claim, but was not originally disclosed.

2.3 Further, there is no definition of what actually is the shoulder height with the present general terms, i.e. where does the shoulder start and end (Article 84 EPC)."

VIII. With this communication, the compliance of claims 2 and 3 of the first auxiliary request with the requirements of Article 123(2) EPC was questioned because:

"3.2 Claim 2 of the first auxiliary request, however, contravenes these requirements.

As, for the above discussed reasons, the ratios in film thicknesses are inextricably linked to bottle geometry, coating conditions and insertion depth it is not possible to use only the ratio of thicknesses found for Sample 3 (17,4/22,5) and use it exclusively to limit claim 2 as originally filed without contravening the requirements of Article 123(2) EPC.

3.3 Claim 3 of the first auxiliary request also introduces undisclosed subject-matter because the application as originally filed only deals with amorphous carbon thicknesses in the shoulder region of a bottle, and there is no disclosure at all of an internally coated bottle in which the thickness of the

amorphous carbon film generally decreases along the bottle axis.

3.4 Point 2.3 above applies mutatis mutandis."

IX. The subject-matter of claim 1 of the second auxiliary request was also regarded as extending beyond the content of the application as filed because:

"4.1 The feature that the height of the shoulder portion is 35 mm is derivable from the application as originally filed as the value Y5 mentioned in table 2 and shown in figure 6. However, where the shoulder portion starts (see page 19) and where it ends is not mentioned in the claim."

As the text of claims 2 and 3 of the second auxiliary request corresponds to the text of claims 2 and 3 of the first auxiliary request, they were also considered, in this communication, as contravening the requirements of Article 123(2) EPC.

X. With the letter dated 4 March 2016 the appellant did not submit any new argument related to the main, first auxiliary and second auxiliary request.

In relation to the third and fourth auxiliary request the appellant argued substantially only as follows.

The additional features of claim 2 of the third auxiliary request are based on paragraph [19] of the patent application as filed.

The additional features of claim 2 of the fourth auxiliary request are also derivable from the patent application as filed, as it was acknowledged in the

communication setting out the preliminary opinion of the Board (see point 4.1 thereof, see also point IX above).

No further arguments were submitted with the subsequent letter dated 4 April 2016.

XI. Oral proceedings before the Board were held in the absence of the appellant.

At the end of the oral proceedings the Board announced its decision.

Reasons for the Decision

1. In its communication accompanying the summons for oral proceedings the Board, taking account of the impugned decision and the submissions of the appellant, raised objections against the main request and the first and second auxiliary requests.
2. This communication explained why, in the Board's opinion, the subject-matter claimed in these requests extended beyond the content of the application as originally filed, contrary to the requirements of Article 123(2) EPC (see points VII-IX above).
3. There has been no attempt by the appellant to refute these objections as raised in the above communication. In its letters dated 4 March 2016 and 4 April 2016 it only attempted to overcome them by submitting further amendments in a third and a fourth auxiliary request.
4. The Board has reviewed the factual and legal situation and sees no reason to depart from its preliminary opinion on the main request (see above point VII), as

well as on the first auxiliary request (see above point VIII) and on the second auxiliary request (see above point IX), as expressed therein.

Taking account of the preceding observations, the Board concludes that the main, first auxiliary and second auxiliary requests contravene the requirements of Article 123(2) EPC.

5. Third auxiliary request

5.1 The subject-matter of claim 1 of the third auxiliary request corresponds to the combination of originally filed claims 1 and 2, and was therefore originally disclosed.

5.2 The appellant argues that paragraph [19] of the application as filed provides a basis for the additional feature of claim 2 of the third auxiliary request, according to which the position at which the inner diameter of the shoulder portion is maximal is located at the border between the shoulder portion and the body portion.

That may well be the case, but it still does not solve the issue as raised by the Board regarding the lack of clarity in the claims in that it is still not defined where the shoulder portion ends (points 2.3 and 3.4 of the preliminary opinion, see points VII and VIII above).

Indeed, when observing the bottle inside diameter , going downward from the mouth portion: after the inside diameter of the bottle has achieved a certain diameter D_1 , it may remain at that diameter D_1 for a certain length and then continue to increase further to a

diameter D2 at which it remains until the bottom portion.

Does the shoulder end at where the inner diameter is D1 or where it is D2?

The issue of lack of clarity is therefore not resolved and this request therefore cannot be allowed.

6. Fourth auxiliary request

6.1 The subject-matter of claim 1 of the fourth auxiliary request also corresponds to the combination of originally filed claims 1 and 2, and is therefore not objectionable under Article 123(2) EPC.

6.2 The Board concurs with the appellant arguing that the additional feature of claim 2 of the fourth auxiliary request, according to which the height of the shoulder portion between the mouth portion and the body portion is 35 mm, is derivable from the application as originally filed as the value Y5 mentioned in table 2 and shown in figure 6.

6.3 However, the amendment of claim 2 does not address, let alone solve the issue of lack of clarity in claim 1 as raised in points 2.3 and 3.4 of the preliminary opinion (see points VII and VIII above). This request is therefore not to be allowed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Nachtigall

H. Meinders

Decision electronically authenticated