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**Datasheet for the decision
of 5 July 2011**

Case Number: T 0974/10 - 3.2.05

Application Number: 02741016.6

Publication Number: 1401623

IPC: B29B 7/88

Language of the proceedings: EN

Title of invention:

Process and apparatus for the production of filled thermoplastic polymers

Patentee:

Magma S.p.A.

Opponent:

EREMA Engineering Recycling Maschinen und Anlagen Gesellschaft m.b.H

Headword:

-

Relevant legal provisions:

EPC Art. 56, 84, 123(2)

Relevant legal provisions (EPC 1973):

-

Keyword:

"Clarity - no (main request and first auxiliary request)"
"Inventive step - yes (second auxiliary request)"
"Sole appellant put in a worse position - no"

Decisions cited:

G 0009/92, G 0001/99

Catchword:

-



Case Number: T 0974/10 - 3.2.05

D E C I S I O N
of the Technical Board of Appeal 3.2.05
of 5 July 2011

Appellant: EREMA Engineering Recycling Maschinen und
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
9 March 2010 concerning maintenance of European
patent No. 1401623 in amended form.

Composition of the Board:

Chairman: W. Zellhuber
Members: H. Schram
M. J. Vogel
P. Lanz
E. Lachacinski

Summary of Facts and Submissions

- I. The appellant (opponent) lodged an appeal against the interlocutory decision of the Opposition Division posted on 9 March 2010 maintaining European patent No. 1 401 623 in amended form.

The Opposition Division held that the grounds of opposition under Article 100(a) EPC (lack of novelty, Article 54 EPC, and lack of inventive step, Article 56 EPC) and Article 100(c) EPC (inadmissible extension, Article 123(2) EPC) did not prejudice the maintenance of the patent in amended form on the basis of the amended claims 1 to 8 filed as a second auxiliary request on 16 November 2009.

- II. Oral proceedings were held before the Board of Appeal on 5 July 2011.

- III. The appellant requested that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent (patent proprietor) requested, as its main request, that the appeal be dismissed, or, as an auxiliary measure, that the decision under appeal be set aside and that the patent in suit be maintained on the basis of any one of the sets of claims filed as first, second and third auxiliary requests, with the second auxiliary request filed during the oral proceedings and the first and third auxiliary requests filed on 6 June 2011.

- IV. Claims 1 and 5 as maintained (main request) read as follows:

"1. A process of producing thermoplastic material containing a filler comprising the steps of:

feeding a base thermoplastic material to a container (1) provided with mixing and stirring means (2, 3) comprising a disintegrating means (3, 3a);

increasing the temperature of the base thermoplastic material until said material has reached a softened condition by means of said stirring and disintegrating means (3, 3a);

feeding a filler to said thermoplastic material in the lower portion of said container (1), where the thermoplastic material is in a softened condition, by means of a gravimetric metering device (7) physically detached from said container (1);

mixing said filler with said softened thermoplastic material within said container (1);

collecting said material filled with said filler from said container and carrying out a densification step of said softened and filled material."

"5. An apparatus for producing filled thermoplastic material comprising: a container (1) having mixing and stirring means (2) comprising a disintegrating means (3, 3a) for bringing said thermoplastic polymeric material to a softened condition and means (7, 10) for feeding a filler to said thermoplastic polymeric within said container; said feeding means comprising a gravimetric metering device (7) physically detached from said container (1) and being located in the lower portion of the container, where the thermoplastic material is in a softened condition; means (5) for collecting the softened and filled material from said

container and means (5-6) for subjecting said filled material to at least one densification step."

Claim 1 of the first auxiliary request is identical to claim 1 of the main request.

Claim 5 of the first auxiliary request differs from claim 5 of the main request in that the wording "[said feeding means] comprising a gravimetric metering device (7) physically detached from said container (1) and being located in the lower portion of the container" has been replaced by the wording "[said feeding means] being located at the lower portion of the container, where the thermoplastic material is in a softened condition and comprising a gravimetric metering device (7) physically detached from said container (1)".

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the wording "by means of a gravimetric metering device (7) physically detached from said container (1)" has been replaced by the wording "by feeding means (4), said feeding means comprising a screw (10) fixed to said container (1), said screw including a cylinder and having an outlet (12) in said lower portion of the container (1), and further comprising a gravimetric metering device (7) physically detached from said screw (10) and said container".

Claim 5 of the second auxiliary request differs from claim 5 of the main request in that the wording "[said feeding means] comprising a gravimetric metering device (7) physically detached from said container (1) and being located in the lower portion of the container"

has been replaced by the wording "[said feeding means] comprising a screw (10) fixed to said container (1), said screw including a cylinder and having an outlet (12) located in said lower portion of the container (1) where the thermoplastic material is in a softened condition, and comprising a gravimetric metering device (7) physically detached from said screw (10) and said container".

V. The documents referred to in the appeal proceedings included the following:

D13 Documents D13a to D13l relating to a prior use by the appellant of the Recycling Installation RGA 160 T + 5D for producing filled thermoplastic material, handed over to, and accepted by, Plasticos Alica, S.A. de C.V., on 1 June 1998.

D35 *Dosieren im modernen Produktionsprozess*, brochure of the firm K-Tron Soder entitled "K-Tron Soder Road Show", issue 4/95, cover page and pages 2 and 11.

D36 DE-U 88 07 569.9

D41 *Schüttguttechnik in der Kunststoffindustrie*, VDI-Gesellschaft Kunststofftechnik, VDI-Verlag GmbH Düsseldorf 1998, front and back cover, two title pages, and pages 154 and 155.

D42 *Der Doppelschneckenextruder*, VDI-Gesellschaft Kunststofftechnik, VDI-Verlag GmbH Düsseldorf 1995, front and back cover, two title pages, and pages 216 and 217.

VI. The arguments of the appellant, in writing and during the oral proceedings, can be summarized as follows:

Objection of lack of clarity (claim 5 as maintained and claim 5 of the first auxiliary request)

Claim 5 as maintained specified that the feeding means, including the gravimetric metering device, was located in the lower portion of the container. However, there was no disclosure in the patent in suit that all parts of the feeding means were located in the container. This objection also applied to claim 5 of the first auxiliary request. Both claims therefore lacked clarity.

Admissibility of the amendments (claims 1 and 5 of the second auxiliary request)

Claim 5 of second auxiliary request no longer contained the feature that the gravimetric metering device was located in the lower portion of the container. This was in breach of the principle of *reformatio in peius*.

The transfer of the filler from the metering device to the screw in claim 1 of the second auxiliary request was not clear, contrary to Article 84 EPC.

The amendments now present in claims 1 and 5 of the second auxiliary request were based on the best mode embodiment described in the patent in suit. Both claims failed to include the feature that the gravimetric metering device had a hopper and a screw 11a and the feature that the screw 10 had an uncovered opening

located below said hopper (cf in particular paragraph [0034] and Figure 3, of the patent in suit), contrary to Article 123(2) EPC.

Objection of lack of inventive step, Article 56 EPC

Document D13 related to the prior use of a recycling installation for producing filled thermoplastic material. This document represented the closest state of the art. The subject-matter of claim 5 of the second auxiliary request differed from the apparatus known from document D13 in that a gravimetric metering device rather than a volumetric metering device was used, and that that gravimetric metering device was physically detached from the container. Since gravimetric metering devices were more accurate than volumetric metering devices, it was obvious to the person skilled in the art to replace the volumetric metering device of the known recycling installation by a gravimetric metering device. Document D35 described a gravimetric metering device and taught that it was of the utmost importance to isolate the gravimetric metering device from its surroundings without any friction. Document D41 taught that a gravimetric metering device must be free standing and that influences from the surroundings, such as vibrations, had to be avoided. Document D42 showed a gravimetric metering device feeding a filler to an outlet screw, from where the filler fell into a hopper positioned under and adjacent to that screw, said hopper being connected to a second screw which was in turn connected to the inlet of an extruder. The gravimetric metering device was thus physically detached from the extruder. It followed that the person skilled in the art starting from document D13, in view

of the disclosure of documents D35, D41 and D42, would have arrived at the subject-matter of claim 5 of the second auxiliary request without exercising inventive skill. This applied likewise to the process claim 1 of said request.

VII. The respondent's arguments, in writing and during the oral proceedings, can be summarized as follows:

Objection of lack of clarity (claim 5 as maintained and claim 5 of the first auxiliary request)

The feature "said feeding means comprising a gravimetric metering device (7) physically detached from said container (1) and being located in the lower portion of the container" in claim 5 as maintained was clear. It consisted of two sentences, viz "comprising a gravimetric metering device (7) physically detached from said container (1)" and "being located in the lower portion of the container". The latter sentence could not refer to the metering device, since otherwise the word "being" should have been deleted. The meaning of the word "in" in the wording "feeding means ... being located in the lower portion of the container" was not "inside or within", but rather indicated that the lower portion was the area where the feeding means were connected to the container.

In claim 5 of the first auxiliary request the order of the sentences referred to above was rearranged with a view to overcoming the clarity objection raised by the Board against claim 5 as maintained, and the expression "located in" was clarified to read "located at", as in claim 9 as granted. Claim 5 of the first auxiliary

request, which corresponded to claim 9 as granted, was therefore clear.

Admissibility of the amendments (claims 1 and 5 of the second auxiliary request)

Claim 5 of second auxiliary request was narrower in scope than claim 5 as maintained and was not to the appellant's disadvantage. The prohibition of *reformatio in peius* was respected.

Claim 1 of the second auxiliary request was clear; there was no need to specify in more detail than given in column 5, lines 48 to 50, of the patent in suit, how the metering device fed the filler to the screw.

Likewise, there was no need to introduce the feature that the metering device comprised a hopper into the independent claims in order to meet the requirements of Article 123(2) EPC, since it was generally disclosed that the metering device fed the filler to the screw without a hopper (see page 8, lines 16 and 17, of the application as filed (published version); see also Figure 1, which did not show a hopper). The feature that the gravimetric metering device 7 was physically detached from the container was disclosed in claim 8 as filed, since the terms "separate" and "detached" were synonymous. This also followed from the passage on page 8, lines 18 to 29, of the application as filed (published version).

The second auxiliary request was thus formally admissible.

Objection of lack of inventive step, Article 56 EPC

The prior use described in document D13 represented the closest state of the art. In the apparatus according to the prior use by the appellant a volumetric metering device was used, which was connected to a feed opening in the wall of the container and was also connected to the container through a bracket. All other counts of prior use by the appellant also concerned apparatuses having volumetric metering devices. For this reason alone it was not obvious to replace the volumetric metering device by a gravimetric metering device. None of the prior art documents taught the use of a gravimetric metering that was completely physically detached from the container. Document D35 taught using a flexible bellow. Document D36 indicated that there was a problem with using a flexible bellow for connecting a gravimetric metering device to an extruder: if the bellow was too rigid, the discharge was not accurate, and if it was too flexible, there was a dusting problem. The person skilled in the art would not refrain from using a bellow since to do so would make the dusting problem worse. The arrows in Figure 7.6 of document D42 represented physical connections. Consequently, the subject-matter of claims 1 and 5 of the second auxiliary request involved an inventive step.

Reasons for the Decision

MAIN REQUEST AND FIRST AUXILIARY REQUEST

1. *Allowability of the amendments, Article 84 EPC*

1.1 Claim 5 as maintained includes the feature (henceforth referred to as feature (f)):

(f) said feeding means comprising a gravimetric metering device (7) physically detached from said container (1) and being located in the lower portion of the container (emphasis added by the Board)

This feature has been amended vis-à-vis claim 6 as granted by the addition of the underlined text.

Whereas the former feature of claim 6 as granted, viz "said feeding means being located in the lower portion of the container", is clear by itself, and can be readily understood with reference to Figures 1, 3 and 4 and paragraphs [0033] to [0035] of the patent in suit to mean that the feeding means located in the lower portion of the container is in fact the outlet 12 and (part of) the screw 10, this cannot be said of feature (f) of claim 5 as maintained.

The respondent attempted to construe the wording of claim 5 as maintained to mean that the gravimetric metering device 7 was physically detached from the container, and located at or near the lower portion of the container.

However, it is intrinsically unclear how feeding means comprising a metering device can be "located in the lower portion of the container" whilst that metering device is "physically detached" from said container. Moreover, there is no support, either in the patent in suit or in the application as filed, that the gravimetric metering device 7 is located in, at or near the lower portion of the container. It is thus unclear whether claim 5 of the first auxiliary request requires the gravimetric metering device 7 to be located in or at the lower portion of the container.

- 1.2 In claim 5 of the first auxiliary request, feature (f) has been reworded as follows:

(f₁) said feeding means being located at the lower portion of the container, ... and comprising a gravimetric metering device (7) physically detached from said container (1)

In the judgment of the Board, the new wording does not solve the intrinsic lack of clarity of the claim for the same reasons as for claim 5 as maintained.

Consequently, claim 5 of the first auxiliary request does not meet the requirements of Article 84 EPC either.

- 1.3 The respondent has argued that claim 5 of the first auxiliary request corresponded to granted claim 9, ie a combination of granted claims 6, 7, 8 and 9. Since lack of clarity, Article 84 EPC, was not a ground for opposition, no objections under this article could be raised against a granted claim.

Whilst the Board concurs with the observation of the respondent that granted claims enjoy immunity with respect to clarity objections, the Board cannot accept that claim 5 of the first auxiliary request is identical to a combination of claims 6, 7, 8 and 9 as granted.

For example, the expression "said feeding means being located in the lower portion of the container" present in claim 6 as granted is no longer present in claim 5 of the first auxiliary request. It seems that said feature of claim 6 as granted and the feature of claim 9 as granted, viz *said means for filler feeding (10) are located at the portion of said container (1) where the stirred material is in o (sic) softened state*, have been merged into a new feature "said feeding means being located at the lower portion of the container". The word "separate from" in claim 8 as granted has been replaced by the expression "physically detached from". The feature of claim 7 as granted, viz *wherein said container comprises means for disintegration (3, 3a) of said termoplastic (sic) material*, has been combined with the wording of claim 6 as granted, viz *a container (1) having mixing and stirring means (2)*, to read "a container (1) having mixing and stirring means (2) comprising a disintegrating means (3, 3a)", in other words, the mixing and stirring means (2) comprise a disintegrating means (3, 3a) (cf claim 2 as granted). Apart from the fact that replacing the word "in" in claim 6 as granted by the word "at" would seem to contravene the requirements of Article 123(3) EPC, it cannot fairly be said that claim 5 of the first auxiliary request is

identical to a combination of claims 6, 7, 8 and 9 as granted.

SECOND AUXILIARY REQUEST

2. *Prohibition of reformatio in peius*

2.1 In a case where the opponent is the sole appellant against an interlocutory decision maintaining a patent in amended form, the patent proprietor is primarily restricted during the appeal proceedings to defending the patent in the form in which it was maintained by the Opposition Division in its interlocutory decision, see the decision of the Enlarged Board of Appeal G 9/92 (Non-appealing party / BMW, OJ EPO 1994, 875), point 2 of the Order, first sentence. The defence may include proposing amendments to the claims if they are appropriate and necessary.

The prohibition of *reformatio in peius* is the principle that, if defending the patent in the form in which it was maintained is not possible, the respondent (patent proprietor) should not be allowed to pursue claims which, if held allowable, would put the appellant in a worse situation than if it had not appealed.

In decision G 1/99 (*Reformatio in peius* / 3M, OJ EPO 2001, 381) the Enlarged Board of Appeal allowed an exception to this principle (see Order): *However, an exception to this principle may be made in order to meet an objection put forward by the opponent/appellant or the Board during the appeal proceedings, in circumstances where the patent as maintained in amended form would otherwise have to be revoked as a direct*

consequence of an inadmissible amendment held allowable by the Opposition Division in its interlocutory decision. The Enlarged Board of Appeal laid down a strict order of possible amendments that a patent proprietor was allowed to file in order to overcome the deficiency.

The Enlarged Board of Appeal also stated (see decision G 1/99, loc. cit., Reasons point 12, last sentence):
"However, in particular if the patent cannot be maintained for reasons which were not raised at the first instance, the non-appealing proprietor deserves protection for reasons of equity" (emphasis added).

In the present case the clarity objection (see point 1 above) was raised by the Board for the first time in appeal. The respondent must therefore be allowed to file amendments as foreseen in decision G 1/99 (loc. cit.), which decision gives due regard to the principle of equity (see also point 13 and point 14, last sentence, of the Reasons).

- 2.2 The first question to address is whether claim 5 of the second auxiliary request would put the appellant in a worse situation than if it had not appealed. Only if it does is the procedure laid down in G 1/99 to be applied.

The contested feature (f) in claim 5 as maintained has been reformulated as:

(f₂) said feeding means comprising a screw (10) fixed to said container (1), said screw including a cylinder and having an outlet (12) located in said lower portion of the container (1) where the

thermoplastic material is in a softened condition,
and comprising a gravimetric metering device (7)
physically detached from said screw (10) and said
container

Claim 5 of the second auxiliary request still includes all the sub-features of feature (f): "said feeding means [being] located in the lower portion of the container" and "said feeding means comprising a gravimetric metering device (7) physically detached from said container (1)", although linguistically arranged in a different order.

- 2.3 The appellant argued that claim 5 as maintained required the gravimetric metering device 7 to be located in the lower portion of the container. Since claim 5 of the second auxiliary request no longer required this to be the case, the consequence was *reformatio in peius*.

In the judgment of the Board, the appellant's interpretation of claim 5 as maintained does not follow unambiguously from the wording of said (unclear) claim, nor is it supported by the description of the patent in suit.

Furthermore, the Opposition Division never intended to maintain claim 5 in a form in which the apparatus comprises a gravimetric metering device 7 located in the lower portion of the container. The whole thrust of the interpretation of claim 5 as maintained in the decision under appeal is that the gravimetric metering device 7 is physically detached from the container, see eg point 5.2 of the Reasons.

2.4 It follows that the second auxiliary request, if held allowable, does not put the appellant in a worse situation than if it had not appealed.

3. *Admissibility of the amendments, Articles 84 and 123(2) EPC*

3.1 The appellant submitted that claim 1 of the second auxiliary request was not clear, since the claim was silent on the manner in which the filler was fed from the gravimetric metering device to the screw.

The last sentence of paragraph [0033] of the patent in suit, which has been cited in point 1.1 above, reads: "*The metering device 7 feeds the filler to a screw 10 that has its outlet in the container 1.*" In the judgment of the Board there is no need to provide more detail than already present in claim 1 of the second auxiliary request about how the filler is fed from the metering device to the feed screw.

Claim 1 of the second auxiliary request therefore meets the requirements of Article 84 EPC.

In the judgment of the Board, claim 5 of the second auxiliary request is also clear. Since this has not been contested by the appellant, there is no need for further substantiation.

3.2 The appellant has submitted that the additional features "a screw (10) fixed to said container (1)" and "said screw including a cylinder and having an outlet (12) (located) in said lower portion of the container"

in claims 1 and 5 of the second auxiliary request were taken from the section "Best mode for carrying out the invention" of the application as filed (published version), see page 5, lines 26 ff, and Figure 3. Since not all of the features of the best mode embodiment were included in claims 1 and 5 of the second auxiliary request (eg the inverted hopper 11 shown in Figure 3) said claims represented an intermediate generalization of the disclosure as filed, and as such contravened the requirements of Article 123(2) EPC. Moreover, there was no disclosure that the gravimetric metering device was physically detached from the container (the device was only physically detached from the screw; claim 8 as filed was not an appropriate basis for this feature, since the different wording "separate from" was used).

In the judgment of the Board, the description of Figure 3 (see page 8, lines 18 to 24) contains the general teaching that "device 7 is physically detached from the cylinder of screw 10".

According to claims 1 and 5 of the second auxiliary request, the screw 10 is fixed to the container 1 (see page 8, line 29, of the application as filed (published version)) and the gravimetric metering device 7 is physically detached from the screw 10 (see page 8, lines 23 and 24, page 9, line 2, and page 10, lines 15 and 16 of the application as filed (published version)). In the judgment of the Board, these two statements imply that the gravimetric metering device 7 must be physically detached from the container (see also claim 8 as filed, wherein the expression "separate from" is used, which is synonymous with the expression "physically detached from").

Claims 1 and 5 of the second auxiliary request therefore meet the requirements of Article 123(2) EPC.

4. *Objection of lack of inventive step, Article 56 EPC*

4.1 Document D13 represents the closest state of the art. The prior use apparatus, ie the recycling installation RGA 160 T + 5D, known from document D13 comprises a volumetric powder doser (see item 11 on page 12 of document D13a) of the firm K-Tron (see document D13d). According to the statements of the witness Mr Michael Pöllhuber, who was heard during the oral proceedings before the Opposition Division, the powder doser was fixed to the container ("Schneidverdichter") via a bracket and mechanically connected to an opening in the wall of the container (see Annex 1 to the minutes, page 18, lines 7 to 22).

The subject-matter of claim 5 of the second auxiliary request differs from the apparatus for producing filled thermoplastic material known from document D13 mainly in:

- (i) said feeding means ... comprising a gravimetric metering device (7)
- (ii) said gravimetric metering device (7) being physically detached from said screw (10) and said container.

Whilst volumetric metering devices and gravimetric metering devices, which discharge a particular volume of material and a particular volume of material per

unit time, respectively, are both well known in the art, and assuming that it is a simple matter of choice whether to opt for one or the other, this is not to say that *starting from document D13* it was obvious to the person skilled in the art to replace the volumetric powder doser of the recycling installation known from said document by a gravimetric metering device without taking additional measures. The person skilled in the art would not consider mounting a gravimetric metering device onto a bracket fixed to the container (as the existing volumetric metering device was mounted) since the container has mixing, stirring and disintegrating means that could vibrate during operation.

Assuming for the sake of argument that the person skilled in the art would consider using a gravimetric metering device rather than a volumetric metering one in the recycling installation known from document D13, he or she might seek to avoid the device being exposed to vibrations and try to isolate it from its surroundings (see page 11, section 4.5, lines 2 to 4, of document D35), for example by mounting the device on a bracket of its own.

Mounting the metering device on a dedicated structure, ie on a structure that is different from the structure of the container or any structure connected thereto, is necessary to ensure that the metering device is detached or separated from the container. However, it is not sufficient to ensure that the metering device is physically detached from the container and screw in the sense of the invention. The expression "physically detached" in feature (ii) must be interpreted narrowly in the sense that there is no physical contact at all

between the metering device and the screw fixed to the container.

In the judgment of the Board, the use of a contactless gravimetric metering device is the essence of the invention claimed in claims 1 and 5 of the second auxiliary request, see column 6, lines 7 to 13, of the patent in suit, which reads: *The use of a "suspended" gravimetric metering device ... comprising metering means detached from the screw ..., makes it possible to obtain an extremely high constancy and uniformity in the percentage of filler in the final material.*"

The use of a contactless gravimetric metering device in a process and apparatus for producing thermoplastic material containing a filler is not known from, or suggested by, the prior art.

In document D35 (see page 11, section 4.5, lines 5 and 6) it is stated that the silicon bellows developed by K-Tron are suitable for connecting the feeding device.

Whilst in document D36 the use of a flexible bellow seal ("Faltenbalg") connecting the outlet of a gravimetric metering device to the inlet of the extruder is identified as a source of error in determining the discharge (weight of material per unit time) (see page 4, lines 9 to 12), the solution to this problem is a different one, ie the decoupling of the flow of mass in the device 4 and the flow of mass to the inlet 5 of screw 9 (see the paragraph bridging pages 6 and 7). However, the gravimetric metering device described in document D36 is mounted onto a bracket, which is connected to the inlet 5 (see page 6,

lines 20 to 24) and a sealing 16 is provided between the lower edge of the outlet of the metering device and the inlet 5 (see page 7, lines 7 to 14).

Document D41 teaches that vibrations should be reduced to a minimum (see page 154, last line) without indicating a solution, however. Whilst it is noted that a defective connection of the inlet and outlet pipes of the metering device may disturb the measurement ("Störgrößen: Fehlerhafte Anbindungen der Befüll- und FALLEITUNG", see page 154, line 15) there is no teaching that the gravimetric metering device should be physically detached from the processing equipment.

Finally, in Figure 7.6 of document D42 (see page 217) a twin-screw extruder is shown comprising a gravimetric metering device 4 that seems to comprise an outlet screw for feeding a filler to a next station, which seems to comprise an inlet screw. There is no disclosure that the filler is fed from the outlet screw to the inlet screw without any a seal, bellow or covering between these screws, or more generally, there is no disclosure that the filler is fed from the metering device 4 to the next station without any physical contact between them.

- 4.2 The subject-matter of apparatus claim 5 of the second auxiliary request is therefore not obvious to the person skilled in the art, and hence involves an inventive step, Article 56 EPC.

The subject-matter of claims 6 to 8, which are dependent on claim 5, similarly involves an inventive step.

This also holds for the subject-matter of process claim 1 of the second auxiliary request and for the subject-matter of claims 2 to 4, which are dependent on claim 1.

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 with the order to maintain the patent on the basis of the following documents:

Claims, No.:

1 to 8 filed as the second auxiliary request during the oral proceedings;

Description, pages:

2 to 5 filed during the oral proceedings; and

Drawings, pages:

8 and 9 as granted.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber