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Datasheet for the decision of 16 February 2023

Case Number: T 0669/20 - 3.2.05

Application Number: 08750208.4

Publication Number: 2155469

IPC: B29C49/20, B29C49/42,

B29C49/04, B29K23/00, B60K15/077, B60K15/03

Language of the proceedings: EN

Title of invention:

Process for manufacturing a fuel tank equipped with an internal accessory

Patent Proprietor:

Plastic Omnium Advanced Innovation and Research

Opponents:

Kautex Textron GmbH & Co. KG Volkswagen Aktiengesellschaft

Relevant legal provisions:

EPC Art. 56, 100(a), 100(b), 107 sentence 2, 108 sentence 1, 108 sentence 2
EPC R. 103(1)(a)

Keyword:

Sufficiency of disclosure (yes)
Inventive step (yes)
Reimbursement of appeal fee (no)
Request for correction of decision under appeal (inadmissible)

Decisions cited:

G 0008/95, G 0001/18, T 0019/90



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0669/20 - 3.2.05

DECISION of Technical Board of Appeal 3.2.05 of 16 February 2023

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on 20 January 2020 concerning maintenance of the European Patent No. 2155469 in amended form.

Composition of the Board:

Chairman P. Lanz
Members: B. Spitzer

A. Bacchin

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Summary of Facts and Submissions

I. All parties, the patent proprietor, opponent 1 and opponent 2 each lodged an appeal against the interlocutory decision of the opposition division finding that European patent No. 2 155 469 (the patent) as amended according to auxiliary request 1, filed on 30 July 2019, meets the requirements of the EPC.

With regard to the appeal fee, opponent 2 gave instructions for debiting it in accordance with the automatic debiting procedure. The patent proprietor and opponent 1 paid the appeal fee by debit order from their respective deposit accounts.

- II. The oppositions were filed against the patent as a whole based on the grounds for opposition under Article 100(a) EPC in conjunction with Articles 54 and 56 EPC, for lack of novelty and lack of inventive step, and Article 100(b) EPC.
- III. The board conveyed to the parties through its communication of 18 June 2020 that an appellant-opponent cannot pay the appeal fee by the automatic debiting procedure. Therefore, the appeal fee for opponent 2's appeal was not validly paid within the prescribed time limit. Pursuant to Article 108, second sentence, EPC, the appeal filed by opponent 2 was provisionally deemed not to have been filed (in accordance with Opinion G 1/18, Headnote 1). However, opponent 2 remained party to the current appeal proceedings as of right within the meaning of Article 107, second sentence, EPC.

The parties did not react to the board's communication.

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IV. Oral proceedings before the board of appeal were held by videoconference on 16 February 2023 in the absence of opponent 2.

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V. Requests

The appellant I (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained as granted (main request). As an auxiliary measure, it was requested that the decision under appeal be set aside and the patent be maintained on the basis of the claims of one of auxiliary requests 1 to 5, filed with the patent proprietor's statement of grounds of appeal; or, as further auxiliary measures, that opponent 1's appeal be dismissed (auxiliary request 6) or that the decision under appeal be set aside and the patent be maintained on the basis of the claims of auxiliary request 7, filed with the patent proprietor's reply.

It was also requested that the appeal fee be reimbursed.

The appellant II (opponent 1) and the other party as of right (opponent 2) requested that the decision under appeal be set aside and that the European patent be revoked.

VI. Among the documents cited in the decision of the opposition division and referred to in the appeal proceedings, the following are relevant for the appeal proceedings:

D5: JP 2847582 B2, including the translation;

D13: D. Labusch: Blasformen - transparent gemacht; Industrieanzeiger, vol. 99,

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No. 38 of 11 May 1977;

D14: EP 0 556 552 A1;

D19: Ingenieurwissen Extrusionsblasformen; Verein Dt. Ingenieure, VDI-Ges. Kunststofftechnik - Düsseldorf: VDI-Verlag, 1979.

VII. Claim 1 of the patent as granted (main request) has the wording as set out below:

"Process for manufacturing a fuel tank equipped with an internal accessory (2) and having a plastic wall produced from a parison (5), said process comprising, in order, the following steps:

- a) the accessory (2) and the molten parison (5) are introduced into a mould (1) so that the accessory is surrounded by the parison (5), said mould comprising cavities equipped with at least one moving part (4); b) a pressurized gas is introduced inside the parison
- (5) to carry out a pre-blow moulding of said parison
 (5);
- c) the pre-blow-moulded parison (5) is pressed locally against the accessory (2) using the moving part (4) in order to firmly attach the two without piercing the parison (5);
- d) the mould (1) is closed and the final blow moulding of the parison is carried out by flattening it against the mould cavities using the pressurized gas; and e) the tank is removed from the mould."

Dependent claim 6 as granted has the following wording:

"Process according to any one of the preceding claims, characterized in that during step d) the mould cavities are pressed against one another and clamp the parison (5) around a blow pin which acts as a support (3) for the accessory (2) during steps a) to d) while being

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withdrawn at the end of step d), and in that when the pin is withdrawn, it leaves an opening in the parison (5) which is resealed before step e) by an appropriate device on the mould."

- VIII. The submissions of the parties relevant to the decision can be summarised as set out below.
 - (a) Main request: inventive step of the subject-matter of granted claim 1 in view of a combination of documents D14 and D5 (ground for opposition under Article 100(a) EPC and Article 56 EPC)
 - (i) Appellant I (patent proprietor)

The subject-matter of granted claim 1 was inventive over document D14 in combination with document D5. Starting from the second embodiment of document D14 as disclosed in Figures 11 to 14 and column 14, line 2 to column 16, line 15, the subject-matter of granted claim 1 differed not only in steps a) and c) as brought forward by the opponents but additionally in step b) and the order of steps c) and d).

Document D14 did not disclose a separate pre-blow-moulding step, only premature blow moulding during the extrusion. The blow moulding in document D14 started after the accessory was introduced into the parison and continued until the parison obtained the final shape. In document D14, the premature blow moulding was done to avoid premature contact between the accessory and the parison. This did not imply an expansion of its volume as claimed in step b) of granted claim 1.

Moreover, in document D14, the parison and the mould were in contact during the alleged pre-blow moulding, impeding the homogenous thickness of the parison (see

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document D14, Figure 12, column 15, lines 6 to 12), whereas the patent's pre-blow moulding involved no contact between the mould and the parison, resulting in a uniform expansion of the parison (see patent, paragraph [0034]). Therefore, step b) was not anticipated by the disclosure of document D14.

Moreover, document D14 did not disclose at which point in time the feet 336 contacted the mould (see document D14, Figure 12 and column 15, lines 23 to 28). According to step c) of granted claim 1, the pre-blow-moulded parison is pressed against the accessory, and subsequently the mould is closed (step d) of granted claim 1). This was not the case in document D14, where the pressing of the parison against the accessory happened during closure of the mould, hence simultaneously (see document D14, column 15, lines 23 to 36; column 15, line 53 to column 16, line 5; Figures 12 and 13). Therefore, the advantages of the current invention, namely a precise and reproducible positioning of the accessory, could not be achieved with the process disclosed in document D14.

Granted claim 1 might not be interpreted in a way that steps c) and d) happened simultaneously since the process of granted claim 1 comprised these steps "in order". Step d) of granted claim 1 defined the process of closing and not only the final state. Consequently, the order of steps c) and d) was a further distinguishing feature.

The technical effect of these distinguishing features was a homogenous thickness of the parison and a precise and reproducible positioning of the accessory. The objective technical problem as formulated by the opponents did not reflect these technical effects and

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was thus incomplete. If the objective technical problem was merely pressure regulation, as alleged by the opponents, the person skilled in the art would not have consulted document D5 but would have modified the process according to the first embodiment of document D14 as disclosed in Figures 1 to 6 of document D14. In view of the distinguishing features and their technical effect as elaborated above, the objective technical problem was instead to provide a process resulting in a more precise positioning of the accessory and a better mechanical quality of the tank.

The person skilled in the art would not have consulted document D5 for the following reasons. First, document D5 did not disclose a pre-blow-moulding step. Second, document D5 had a different purpose. While pressure regulation for a better fixation of the accessory was mentioned in document D5, document D5 was mainly focused on reducing manufacturing costs by e.g. avoiding the subsequent sealing of an aperture for the blow pin (see document D5, paragraphs [0007] to [0008]). Document D5 did not address the problem of a precise positioning of the accessory. In addition, the skilled person would not have combined the teachings of documents D14 and D5 because document D14 described fixing the accessory after closure of the mould, whereas document D5 described fixing the accessory before closure of the mould. For these reasons, the teachings of documents D5 and D14 were incompatible.

Even if the person skilled in the art had consulted document D5, they would not have arrived at the claimed invention.

The process described as state of the art in Figures 7 to 11 of document D5 was similar to the second

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embodiment of document D14, except for the direction of pressing being inverted. The process according to Figures 7 to 11 would have taken the person skilled in the art further away from the claimed solution.

Furthermore, document D5 did not disclose a pre-blow moulding-step according to step b) of granted claim 1. Thus, a homogenous thickness of the tank would not have been achieved. On the contrary, the fixing of the baffle plate 35 to the moving part of the mould 31 limited the expansion of the tank around the baffle plate (see document D5, Figures 1 to 3). The implementation of a pre-blow-moulding step in document D5 would not have been possible because the blow pin 37 pierced the parison only after closure of the mould (see document D5, Figure 3). Document D5 also did not disclose step c) of granted claim 1, i.e. that the preblow-moulded parison was pressed locally against the accessory using the moving part. Finally, the person skilled in the art would not have replaced the fixed mandrel 314 of document D14 with the movable support rod 36 of document D5 (see document D14, column 15, line 27 and document D5, paragraph [0009], Figure 2). While document D5 disclosed the moving parts of the mould, it did not disclose the process of granted claim 1. Even if assuming that document D14 revealed a preblow-moulding step, the person skilled in the art would still have been uncertain about the appropriate timing for fixing the parison to the movable parts of document D5. In the second embodiment of document D14, the closure of the mould and the fixing of the pre-blowmoulded parison were connected since the parison was fixed between the feet 336 and the mould 310b. In document D5, the fixing of the parison was independent of the closure of the mould. Therefore, the person skilled in the art was not taught by a combination of

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documents D14 and D5 whether to fix the parison before or after the pre-blow-moulding step.

Thus, even by combining the teachings of documents D14 and D5, the person skilled in the art would not have arrived at the claimed solution.

ii) Appellant II (opponent 1)

The subject-matter of granted claim 1 was not inventive over a combination of documents D14 and D5. The subject-matter of granted claim 1 differed from document D14 only in steps a) and c), in particular, the "at least one moving part".

Contrary to the patent proprietor's arguments, document D14 disclosed a pre-blow-moulding step according to step b) of granted claim 1. Features like a homogeneous thickness and a uniform expansion attributed to the pre-blow-moulding step by the patent proprietor were not reflected in granted claim 1. Pre-blow moulding resulted in a pre-stretch and involved nothing else (see e.g. documents D13 and D19).

Furthermore, it was not correct that steps c) and d) of granted claim 1 were carried out simultaneously in document D14. "Im Verlauf der weiteren Schließbewegung" (see document D14, column 15, line 23) meant "during the closing movement". First, there was contact between the parison and the mould (see document D14, Figure 13), and then the closing movement continued until the feet protruded into the soft parison so that the feet pressed the parison against the inner wall of the mould (see document D14, Figure 14; column 15, lines 33 to 36). Nothing else was meant by steps c) and d) of granted claim 1. Granted claim 1

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had to be interpreted to mean that the closing started already during step c). This gradual closing of the mould was also evident from paragraph [0038] of the patent. Thus, document D14 disclosed the order of steps c) and d) of granted claim 1, and the only distinguishing features were the at least one moving part in steps a) and c) of granted claim 1.

The objective technical problem was to find a method that regulates the pressure while attaching the accessory to the parison. Since document D5 was from the same field and addressed the same objective technical problem (see document D5, paragraphs [0001] and [0007]), the person skilled in the art would have considered the teachings of document D5.

Document D5 started from prior art without the use of movable parts, as illustrated in Figures 10 to 12 of document D5. Similar prior art without movable parts was also revealed in document D14. Starting from this prior art without movable parts, document D5 proposed the use of movable parts (see document D5, Figures 1 to 3, paragraph [0009]) to overcome the disadvantage that the pressure could not be regulated during the final blow moulding (see document D5, paragraphs [0003] and [0007]). Therefore, in document D5, step c), i.e. the parison being pressed locally against the accessory using the moving part, was done before step d), i.e. the closure of the mould and the final blow moulding.

Document D5 did not explicitly mention pre-blow moulding. However, pre-blow moulding was standard for large hollow articles.

The person skilled in the art would not have turned to Figures 7 to 11 of document D5, contrary to what was

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alleged by the patent proprietor. These figures showed the prior art, a method similar to that of document D14, as confirmed by the patent proprietor. The similarity of this prior art was further incentive for the person skilled in the art to take into account the teachings of document D5. In document D5, as in the second embodiment of document D14, the pressure was applied from the outside (see document D5, Figures 1 to 3: 31). Therefore, the teachings of documents D14 and D5 were not contradictory.

Contrary to the opposition division's reasoning (see decision under appeal, Reasons, point 18.4.6) and even in the case of moving parts on both sides, the pressing sections in document D5 would not have pierced the parison since they were controllable via the driving means (see document D5, paragraph [0014]; Figures 1 to 3: 32). Furthermore, the person skilled in the art would not have envisaged moving parts at locations where there was no part of the accessory to be fixed.

For the blow pin, the opposition division's reasoning was not correct (see decision under appeal, Reasons, point 18.4.6) since the person skilled in the art starting from the second embodiment of document D14 would not have changed the blow pin. Pre-blow moulding and the blow pin were disclosed in document D14. There was no reason for the person skilled in the art to deviate from this arrangement since they were looking for a solution to regulate the pressure while attaching the accessory to the parison. Even if they replaced the blow pin 314 of document D14 with the support rod 36 of document D5, they knew that they had to provide a blow pin such as the blow pin 37 of document D5. Granted claim 1 could be implemented using such an arrangement.

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For the claimed order of the steps, the person skilled in the art would not have deviated from the order disclosed for the second embodiment of document D14. Since document D14 already solved the problem of uniform expansion by pre-blow moulding the parison, it was obvious for the person skilled in the art to retain this benefit.

(iii) Opponent 2

Opponent 2 argued in writing that the subject-matter of claim 1 was not inventive over a combination of documents D14 and D5. Its arguments did not go beyond those of appellant II (opponent 1) (see above).

- (b) Main request: sufficiency of disclosure
 - (i) Appellant I (patent proprietor)

The claimed invention was sufficiently disclosed in the patent. Pre-blow moulding belonged to the state of the art and was also possible with open ends. The concept of pre-blow moulding was generally known and did not imply any undue burden for the person skilled in the art. It was not necessary to include all the details in the patent. The embodiment disclosed in paragraph [0035] of the patent was optional. The sealing of the upper and lower ends of the parison in a leaktight manner did not prevent the person skilled in the art from pre-blow moulding the parison as claimed in granted claim 1.

For dependent claim 6 as granted, reference was made to paragraphs [0024] to [0035] and [0037] to [0041] of the patent. These passages described the different steps, including the withdrawal of the support in detail. The

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jaws clamped the cylindrical part of the parison to seal the opening. Thus, the invention was disclosed sufficiently clearly and completely for it to be carried out by the person skilled in the art.

(ii) Appellant II (opponent 1)

Step b) of claim 1 was not sufficiently disclosed in view of the description, especially paragraph [0035], according to which the lower and upper ends of the parison were "preferably sealed in a leaktight manner". This view was shared by the opposition division (see decision under appeal, Reasons, point 15.3.2). The term "preferably" implied that the sealing in a leaktight manner was not indispensable, which, in turn, resulted in an insufficiently disclosed embodiment since according to paragraph [0034] of the patent, the internal volume of the pre-blow-moulded parison should lie in the range of 70 to 90% of the internal volume of the tank. This significant increase could not be achieved with an open end. Therefore, the skilled person was not able to obtain substantially all embodiments falling within the ambit of the claims (see decision T 19/90, Case Law of the Boards of Appeal of the European Patent Office, 10th edition, July 2022 (Case Law), II.C.5.4.).

Furthermore, dependent claim 6 of the main request was not sufficiently disclosed. The person skilled in the art did not know of an appropriate device, as referred to in dependent claim 6, with which the opening left by the pin could be resealed before the mould was opened. The corresponding paragraph [0039] of the patent did not solve this deficiency since the "sorts of jaws" were positioned "in the mould" according to paragraph [0039] and "on the mould" according to dependent claim

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6. It was questionable how an opening in the tank could be sealed if the tank was still inside the closed mould.

(iii) Opponent 2

Opponent 2 did not raise any objection of insufficiency of disclosure and did not put forth any arguments in this regard.

- (c) Patent proprietor's request for correction of the decision under appeal
 - (i) Appellant I (patent proprietor)

A correction of point 7 of the Summary of Facts and Submissions of the decision under appeal, which should read "introduced document D20 (being D21 in the list of evidence above)" instead of "introduced document D20 (being D22 in the list of evidence above)", was requested.

- (d) Patent proprietor's request for reimbursement of the appeal fee
 - (i) Appellant I (patent proprietor)

The opposition division admitted the late-filed objection of insufficiency of disclosure against step b) of claim 1 without properly exercising its discretion. Moreover, the patent proprietor became aware of this objection only on 24 September 2019 via online file inspection. A request for postponement of the oral proceedings before the opposition division scheduled for 2 October 2019 was considered but deliberately not filed. The admittance of the objection

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of insufficiency of disclosure against step b) of claim 1 was tainted by a substantial procedural violation. Based on this, reimbursement of the appeal fee was requested.

Reasons for the Decision

- 1. Opponent 2's appeal deemed not filed
- 1.1 The decision of the opposition division dated 20 January 2020 was duly notified to Volkswagen Aktiengesellschaft, opponent 2 in the opposition proceedings, on 23 January 2020 (date of receipt of form 2936).
- 1.2 In accordance with Article 108, first sentence, the period for filing the notice of appeal expires two months after the date of notification of the decision. The notice of appeal is not deemed to have been filed until after the fee for appeal has been paid (Article 108, second sentence, EPC). In the current case, the two-month period expired on 30 March 2020.
- 1.3 The notice of appeal was filed by opponent 2 in time on 27 March 2020. With regard to the appeal fee, opponent 2 gave instructions for debiting it in accordance with the automatic debiting procedure.

Under the provisions laid down in the Arrangements for the automatic debiting procedure (AAD), an account holder may file with the EPO an automatic debit order to ensure automated payment of all the fees due in the proceedings for which the order is filed, except those expressly excluded under point 3.2 AAD, e.g. all fees - 15 - T 0669/20

not payable by the applicant or patent proprietor, notably the opposition fee. Accordingly, the fees for appeal are only covered by automatic debiting if the appeal is filed by the applicant or patent proprietor (see Annex A.2 to the ADA - Information from the EPO concerning the automatic debiting procedure, Supplementary publication 3, OJ EPO 2022, 37).

It follows that since an appellant-opponent cannot pay the appeal fee by the automatic debiting procedure, in the current case, the appeal fee was not paid by opponent 2 within the prescribed time limit.

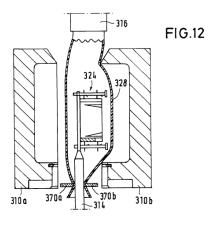
- 1.4 Pursuant to Article 108, second sentence, EPC, opponent 2's appeal was accordingly deemed not to have been filed (see also opinion G 1/18, Headnote 1). Opponent 2 remained party to the current appeal proceedings as of right within the meaning of Article 107, second sentence, EPC.
- 2. Main request: inventive step of the subject-matter of claim 1 over a combination of documents D14 and D5 (Article 100(a) EPC in combination with Article 56 EPC)
- 2.1 According to the opponents, the subject-matter of claim 1 of the main request lacked an inventive step starting from document D14 in combination with document D5.
- 2.2 Suitable starting point for the assessment of inventive step and distinguishing features
- 2.2.1 The board agrees with the parties and the opposition division's conclusion that the embodiment shown in Figures 11 to 14 of document D14 is a suitable starting point for the assessment of inventive step of the subject-matter of claim 1 of the main request and that

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steps a) and c) of claim 1, in particular "at least one moving part", are not disclosed in document D14.

- 2.2.2 In the board's opinion, step b) and the order of stepsc) and d) are disclosed in document D14.
- 2.2.3 Document D14 explicitly discloses a pre-blow-moulding step in column 15, lines 18 to 23. Figure 12 of document D14 shows a first phase of introducing a pressure medium and widening the parison.

"Damit besteht die Möglichkeit, durch ein Druckmedium, welches durch den Dorn 314 zugeführt wird, bereits vor dem Schließen der Blasform den Vorformling teilweise aufzuweiten. Eine erste Phase dieses Aufweitvorganges ist in Fig. 12 dargestellt."



This means that the parison is pre-blow moulded before the mould is closed (see document D14, Figure 12). The fact that the parison contacts the mould in Figure 12 of document D14 is contradictory neither to the literal wording in document D14 that the parison is partly widened before the mould is closed nor to the wording of step b) of granted claim 1. Contact between the parison and the mould cavities is not excluded by the wording of claim 1 or the description of the patent (see patent, paragraph [0034]). The pre-blow-moulding

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results in a better shaping of the parison, which is explicitly disclosed in document D14 (see document D14, column 15, lines 42 to 53).

The patent proprietor's argument that document D14 did not differentiate between a pre-blow moulding and the final blow moulding cannot be accepted by the board. The pre-blow moulding is done before the final blow moulding when the mould is closed. This is disclosed in document D14, column 15, lines 33 to 42:

"Das Verfahrensstadium, bei welchem die Fußteile 336 mit dem Wandbereich 332 in Berührung sind, ist in Fig. 13 dargestellt. Die Blasform 310 ist vollständig geschlossen. Das Aufweiten des Vorformlings 328 zum Hohlkörper 330 ist zu diesem Zeitpunkt bereits weitgehend abgeschlossen, so daß im folgenden Verfahrensabschnitt nur noch die beiden oben und unten befindlichen Endbereiche des Vorformlings bis zur Anlage an der Blasform aufzuweiten sind." (see also document D14, Figures 13 and 14)

Correspondingly, step d) of granted claim 1 defines that "the mould (1) is closed and the final blow moulding of the parison is carried out by flattening it against the mould cavities using the pressurized gas".

Consequently, document D14 discloses a pre-blow-moulding step in accordance with step b) of claim 1 as granted.

2.2.4 Regarding whether document D14 also anticipates the order of steps c) and d) as defined in claim 1, the board refers to document D14, column 15, lines 23 to 30:

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"Im Verlauf der weiteren Schließbewegung der Blasformteile 310a, 310b wird der Wandbereich 332 durch die Wandung des Blasformteiles 310b gegen die Fußteile 336 der vom dabei nicht bewegten Dorn 314 getragenen Halterung 324 gedrückt, wobei der Druck ausreicht, um bei der anschließenden Verfestigung des den Hohlkörper bildenden Materials eine dauerhafte Schweißverbindung zwischen den Fußteilen 336 der Halterung 324 und dem Wandbereich 332 des Hohlkörpers herbeizuführen."

This passage concerns the transition between Figures 12 and 13 when the mould is gradually closed. In the last phase of the mould closing movement, closing mould part 310b locally presses the soft parison against feet 336 of the accessory, with the pressure being sufficient to cause a permanent welded joint between the feet 336 and the parison wall portion. Figure 13 depicts when the mould is completely closed before the final blow moulding of the parison is carried out (see document D14, column 15, lines 36 to 42, cited above).

Consequently, document D14 discloses that the pre-blow-moulded parison is pressed locally against the accessory to firmly attach the two before the mould is closed and the final blow moulding of the parison is carried out.

The patent proprietor essentially argued that in contrast to the method according to document D14, granted claim 1 required that the mould closing movement start only after completion of step c). The board does not agree since the claim wording of step d) does not necessarily imply such a limitation and because paragraph [0038] of the patent explicitly mentions the possibility of gradually closing the mould between steps b) and d). For these reasons, the order

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of steps c) and d) does not constitute a further distinguishing feature of granted claim 1 compared to document D14.

In view of these considerations, the subject-matter of granted claim 1 differs from the disclosure of document D14 in steps a) and c).

- 2.3 Technical effect and objective technical problem
- 2.3.1 According to the patent and as brought forward by opponents, the technical effect of the differentiating features of steps a) and c), in particular the "at least one moving part", is that "the movement and the pressure that it exerts on the parison at the location of its attachment to the accessory are controllable" (see patent in suit, paragraph [0030]).
- 2.3.2 The board is not convinced by the patent proprietor's argument that a further effect was a precise positioning of the accessory due to the fact that the accessory is pressed against the pre-blow-moulded parison before the mould is closed. In the board's view, this technical effect is not addressed in the patent and not related to the use of "at least one moving part" in steps a) and c) of granted claim 1 but to the order of steps c) and d) which, however, is disclosed in document D14.
- 2.3.3 Consequently, the board shares the opponents' view that the objective technical problem is the improvement of pressure regulation for fixing the accessory to the parison (see point 2.2.5 of opponent 1's statement of grounds of appeal).

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- 2.4 Obviousness in view of document D5
- 2.4.1 Document D5 discloses an apparatus for manufacturing a resin fuel tank having a baffle plate formed therein by blow moulding a parison. Document D5 addresses the problem that in the conventional example (see document D5, Figures 7 to 11; paragraph [0007]), "it is impossible to control an applied pressure at the time of welding". Thus, document D5 is from the same field, and the board has no doubt that the person skilled in the art would have considered the teachings of document D5 when seeking to solve the objective technical problem.
- 2.4.2 While the board agrees with the patent proprietor that document D5 does not disclose a pre-blow-moulding step, it is not convinced by the patent proprietor's argument that this would discourage the person skilled in the art from considering the teachings of document D5 when looking for a solution to the above-mentioned objective technical problem. Furthermore, pre-blow moulding to achieve a uniform thickness was already known from document D14 (see document D14, column 15, lines 42 to 53).
- 2.4.3 As a solution to the objective technical problem, document D5 suggests "a pair of pressing sections slidably disposed in moulds" (see document D5, Figures 1 to 3; paragraph [0009]). The board concurs with the parties that this anticipates the feature of the mould equipped with at least one moving part according to step a) of granted claim 1.
- 2.4.4 For step c), the board agrees with the patent proprietor's reasoning. According to step c) of granted claim 1, "the pre-blow-moulded parison is pressed

locally against the accessory using the moving part in order to firmly attach the two without piercing the parison". The pressing is anticipated by document D5, which discloses that the moving part presses the parison locally against the accessory before the mould is closed (see document D5, Figure 2). However, the combination of documents D14 and D5 does not teach whether step c) is done before or after the pre-blowing according to step b). Document D5, on the one hand, does not disclose a pre-blow-moulding step. Rather, the parison is blow moulded after closure of the mould, the latter being independent of the fixing of the accessory to the parison. In document D14, on the other hand, the closing movement of the mould and the fixing of the accessory to the parison are coupled processes, which, in the context of the arrangement of document D14, implies that step b) has to be done before step c). If, however, the skilled person considered providing the mould of document D14 with the moving part of document D5, the closing movement of the mould and the fixing of the accessory to the parison would be decoupled, and the skilled person would be free to carry out step c) before or after the pre-blowing of step b). A combination of documents D14 and D5 would therefore not point the skilled person to the process of granted claim 1.

2.4.5 Opponent 1 argued that by just replacing the means for pressing the (pre-blow-moulded) parison locally against the accessory, the person skilled in the art would not have changed the order of process steps known from document D14.

In the board's view, this is not convincing since in document D14, the closure and the fixing are inevitably linked. Once these two steps are decoupled, the person

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skilled in the art is no longer constrained by this order. As outlined above and irrespective of the further questions as to whether the person skilled in the art would have used one or two moving parts in a combination of documents D14 and D5 and how the mandrel would then have been designed, this combination of documents provides no teaching as to the claimed sequence of process steps b) and c). For this reason alone, the subject-matter of claim 1 of the main request is not rendered obvious by the combination of documents D14 and D5.

2.5 Conclusion on inventive step of the subject-matter of claim 1 of the main request over a combination of documents D14 and D5

The subject-matter of claim 1 of the main request is not obvious starting from document D14 in combination with document D5. It is thus based on an inventive step, and the ground for opposition under Article 100(a) EPC in conjunction with Article 56 EPC does not prejudice the maintenance of the patent as granted.

- 3. Main request: sufficiency of disclosure (Article 100(b) EPC)
- 3.1 According to opponent 1, the term "preferably" in paragraph [0035] implied that the sealing in a leaktight manner of the parison was not indispensable for the pre-moulding step b) of granted claim 1.

 However, a significant increase of the internal volume during pre-blow moulding could not be achieved with an open parison end. Therefore, the skilled person was not able to substantially obtain all embodiments falling within the ambit of the claims.

3.2 Step b) of granted claim 1 requires that "a pressurized gas is introduced inside the parison (5) to carry out pre-blow moulding of said parison (5)". It is uncontested that pre-blow moulding a parison is a generally known measure in the field of blow moulding containers such as fuel tanks. Paragraph [0035] of the patent discloses that during this step, it is preferable that the upper and lower edges of the parison are not welded but that a leaktight seal is provided by suitable devices located respectively underneath and on top of the mould. The board does not share opponent 1's view that this passage suggests that the pre-blowing step is carried out with an open parison end. Even if this were the case and the skilled person realised that for a particular fuel tank design a significant increase of the internal volume during pre-blow moulding could not be achieved with an open parison end, they would be taught in paragraph [0035] of the patent how these difficulties could be overcome, namely by welding the ends of the parison or closing them with a sealing device. Thus, in the board's view, for step b) of granted claim 1, the objection of insufficiency of disclosure must fail.

Decision T 19/90 cited by opponent 1 confirms that "[o]nly if there are serious doubts, substantiated by verifiable facts, may an application be objected to for lack of sufficient disclosure" (see decision T 19/90, Reasons 3.3).

3.3 A further objection of insufficient disclosure was raised against dependent claim 6 as granted in view of the sealing device.

The board notes that paragraph [0039] of the patent discloses that "[t]his opening may be resealed before

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demoulding of the tank, and preferably immediately after removal of the pin, by dint of an appropriate device (sorts of jaws) in the mould". The skilled person is thus generally taught that the sealing device of claim 6 can be implemented in the form of jaws. It is not apparent why the fact that claim 6 defines that the device for sealing the opening is provided "on the mould", while paragraph [0039] of the description suggests that the device can be "in the mould", would present the skilled person with insurmountable difficulties in implementing the invention.

Thus, the objection of insufficiency of disclosure against granted claim 6 is equally unconvincing to the board.

3.4 Conclusion on sufficiency of disclosure

The invention is disclosed in a manner sufficiently clear and complete to be carried out by a person skilled in the art. The ground for opposition under Article 100(b) EPC does not prejudice the maintenance of the patent as granted.

4. Patent proprietor's request for correction of the decision under appeal

The patent proprietor's request for correction of the decision under appeal (see point VIII. (c) above) is inadmissible because it is not within the board's powers to make formal corrections to the first-instance department's decision (see decision G 8/95, Reasons, point 3.4; Case Law, III.L.1.1). The board additionally observes that this request is rendered moot considering that the decision under appeal is to be set aside.

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- 5. Patent proprietor's request for reimbursement of the appeal fee
- 5.1 The patent proprietor submits that the opposition division admitted the late-filed objection of insufficiency of disclosure against step b) of claim 1 without properly exercising its discretion. The admittance of this objection was tainted by a substantial procedural violation which justified the reimbursement of the appeal fee.
- 5.2 The board first notes that an erroneous exercise of discretion by an opposition division does not necessarily imply that a substantial procedural violation occurred. In the current case, the opposition division evidently considered the insufficiency objection against step b) of granted claim 1 to be sufficiently relevant that it might prejudice the maintenance of the patent as granted. It is also observed that even if the patent proprietor only became aware of the objection shortly before the oral proceedings, it deliberately decided against filing a request for postponement of the oral proceedings before the opposition division scheduled for 2 October 2019 (see statement of grounds of appeal, page 2, paragraph 7). Moreover, the patent proprietor does not contest that it had an opportunity to comment on the admittance of this objection during the oral proceedings. It is thus not apparent that the opposition division violated the patent proprietor's right to be heard when admitting the insufficiency objection against step b) of claim 1 into the opposition proceedings. Under these circumstances, a reimbursement of the appeal is not equitable, and the patent proprietor's request to that effect must be refused (Rule 103(1)(a) EPC).

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Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is maintained as granted.
- 3. The appeal of appellant II is dismissed.
- 4. The appeal of opponent 2 is deemed not to have been filed.
- 5. The request of appellant I for reimbursement of the appeal fee is refused.

The Registrar:

The Chairman:



N. Schneider

P. Lanz

Decision electronically authenticated