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D E C I S I O N
of 22 October 2002

Case Number: T 0473/99 - 3.2.5

Application Number: 91311947.5

Publication Number: 0493068

IPC: B29C 47/02

Language of the proceedings: EN

Title of invention:

Method and apparatus for manufacturing panel with frame

Patentee:

TOKAI KOGYO KABUSHIKI KAISHA

Opponent:

ASAHI GLASS COMPANY LTD

Headword:

-

Relevant legal provisions:

EPC Art. 123(2), 54, 56

Keyword:

"Reinstating broader claims in appeal proceedings than the claims defended before the Opposition Division is a matter of discretion of the Board"

"Added subject-matter (main request and first auxiliary request) - no"

"Novelty (main request) - no"

"Inventive step (first auxiliary request) - yes"

Decisions cited:

T 0123/85, T 0331/87, T 0840/93

Catchword:

-



Case Number: T 0473/99 - 3.2.5

D E C I S I O N
of the Technical Board of Appeal 3.2.5
of 22 October 2002

Appellant: TOKAI KOGYO KABUSHIKI KAISHA
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Respondent: ASAHI GLASS COMPANY LTD
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Representative: Rutetzki, Andreas, Dipl.-Ing.
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Decision under appeal: Interlocutory decision of the Opposition Division
of the European Patent Office posted 5 March 1999
concerning maintenance of European patent
No. 0 493 068 in amended form.

Composition of the Board:

Chairman: W. Moser
Members: H. M. Schram
W. R. Zellhuber

Summary of Facts and Submissions

I. On 29 April 1999, the appellant (patentee) lodged an appeal against the interlocutory decision of the Opposition Division posted 5 March 1999, refusing the request of the appellant for maintenance of patent No. 0 493 068 in amended form according to the main request, but maintaining the patent in amended form according to the auxiliary request of the appellant, the appeal fee being paid at the same time. The statement setting out the grounds of appeal was filed on 13 July 1999.

Opposition was filed against the patent as a whole based on Article 100(a) EPC (lack of novelty and inventive step). During the oral proceedings before the Opposition Division the respondent (opponent) had raised a fresh ground for opposition, viz. that the patent, or more particularly, claim 1 as granted contained subject-matter extending beyond the contents of the application as filed (cf. Article 100(c) EPC). With a view of overcoming this objection, the appellant had filed a new main request which replaced his former main request to maintain the patent as granted.

The Opposition Division held that whereas the grounds of opposition did not prejudice the maintenance of the patent in amended form according to the auxiliary request, the new main request of the appellant was not allowable, since claim 1 of said request did not meet the requirements of Article 123(2) EPC.

The following documents were inter alia referred to in the appeal proceedings:

E3: JP-A-57 158479 (English translation)

E8: DE-C-30 08 055

E11: DE-A-31 25 478

II. Oral Proceedings were held before the Board of Appeal on 22 October 2002.

At the end of the oral proceedings, the requests of the parties were as follows:

(i) The appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of the following documents:

(a) claims 1 to 8 as granted as main request; or

(b) claims 1 to 8 submitted as first auxiliary request during oral proceedings; or

(c) claims 1 to 8 filed as second auxiliary request on 20 September 2002; or

(d) claims 1 to 8 filed as third auxiliary request on 20 September 2002; or

(e) claims 1 to 8 filed as fourth auxiliary request on 20 September 2002.

(ii) The respondent requested that the appeal be dismissed.

III. Claims 1 and 4 as granted (main request) read as

follows:

"1. A method of manufacturing a panel unit (2) comprising a panel (3), such as a window glass, and a frame (5) formed on and around a peripheral edge of said panel, said method comprising the steps of:

preparing molding die means (11) having an extrusion port (21) for extruding molding material for the frame; and

moving the peripheral edge of the panel relative to said extrusion port (21) of the molding die means (11) along a predetermined orbital path while extruding molding material from said extrusion port (21) to produce a frame (5) continuously formed on said peripheral edge of the panel (3) by extrusion molding, the external size of said panel unit (2) thereby conforming to a predetermined size irrespective of panel size fluctuation."

"4. Apparatus for manufacturing a panel unit (2) comprising a panel (3) such as a window glass, and a frame (5) formed on and around a peripheral edge of the panel (3), said apparatus comprising:

molding die means (11) for forming said frame (5) on the peripheral edge of said panel (3) by extrusion molding;

panel retaining means (60) located adjacent to said molding die means (11); and

moving means (24) connected to one of said molding die means (11) and said panel retaining means (60) for providing continuous relative movement of said molding die means (11) and said panel retaining means (60) along a predetermined orbital path;

said molding die means (11) having an extrusion port (21) for extruding a molding material of said

frame (5);

said extrusion port (21) of said molding die means (11) being engageable with the peripheral edge of said panel (3) retained by said panel retaining means (60);

said extrusion port (21) of said molding die means (11) and the peripheral edge of said panel (3) being movable continuously relative to each other by operation of said moving means (24)."

Claims 1 and 4 according to the first auxiliary request read as follows:

"1. A method of manufacturing a panel unit (2) comprising a panel (3), such as a window glass, and a frame (5) formed on and around a peripheral edge of said panel, said method comprising the steps of:

preparing molding die means (11) having an extrusion port (21) for extruding molding material for the frame such that the cross section of the frame is defined by the peripheral edge of the panel (3) and an inner peripheral surface of the extrusion port (21), and

moving the peripheral edge of the panel relative to said extrusion port (21) of the molding die means (11) along a predetermined orbital path while extruding molding material from said extrusion port (21) to produce a frame (4) continuously formed on said peripheral edge of the panel (3) by extrusion molding, the external size of said panel unit (2) thereby conforming to a predetermined size irrespective of panel size fluctuation."

"4. Apparatus for manufacturing a panel unit (2) comprising a panel (3), such as a window glass, and a frame (5) formed on and around a peripheral edge of

said panel (3), said apparatus comprising:

molding die means (11) for forming said frame (5) on the peripheral edge of said panel (3) by extrusion molding;

panel retaining means (60) located adjacent to said molding die means (11); and

moving means (24) connected to one of said molding die means (11) and said panel retaining means (60) for providing continuous relative movement of said molding die means (11) and said panel retaining means (60) along a predetermined orbital path;

said molding die means (11) having an extrusion port (21) for extruding a molding material of said frame (5) such that the cross section of the frame is defined by the peripheral edge of the panel (3) and an inner peripheral surface of the extrusion port (21);

said extrusion port (21) of said molding die means (11) being engageable with the peripheral edge of said panel (3) retained by said panel retaining means (60);

said extrusion port (21) of said molding die means (11) and the peripheral edge of said panel (3) being movable continuously relative to each other by operation of said moving means (24)."

IV. The appellant argued essentially as follows:

Reinstating broader claims in appeal proceedings than the claims defended before the Opposition Division?

It was only in response to the ground for opposition under Article 100(c) EPC, raised by the respondent for the first time during oral proceedings before the Opposition Division, that new claims 1 to 8 were filed as main request, with a view to meeting the requirements of Article 123(2) EPC. In decision

T 123/85 (OJ EPO 1989, 336) it was held that a patentee requesting maintenance of his patent in a limited form did not, by virtue of such limitation, irrevocably abandon subject-matter covered by the patent as granted. It followed from Article 111(1) EPC and the rules governing the filing of amendments in opposition proceedings that the admission of requests other than the requests rejected by the Opposition Division was a matter of discretion of the Board of Appeal (see T 840/93, OJ EPO 1996, 335).

Inadmissible extension in claim 1 of the main request (claim 1 as granted)?

The feature in claim 1 as filed that the panel must be engaged into the extrusion port was nowhere in the application as filed described as essential for the performance of the invention. In the application as filed the invention was explained by way of example with reference to Figures 4 to 11. This example was referred to as a preferred embodiment, see column 4, lines 14 to 16, of the A-specification. Admittedly, in this example the panel was inserted into the extrusion port. However, the skilled reader of the application would readily appreciate that no special type of engagement was required for bringing the invention into practice. The deletion of the "engagement" feature during prosecution of the application was thus allowable.

Main request - novelty

Document E11 related to an *injection* molding process, wherein an *injection* nozzle was employed for injecting the molding material in the opening between the

templates, whereas claim 1 required the use of an *extrusion* port which - by definition - defined the shape of the extruded mass. By way of contrast, the shape of the port of the injection nozzle shown in document E11 was irrelevant for the final shape of the frame. With the extrusion molding process known from document E8, a frame segment was molded either onto a single straight side of a panel at a time, or onto two opposite straight sides at a time. It was not possible to continuously mold a complete frame around the peripheral edge of the panel. The panel units produced by the method according to document E8 did not have a uniform size, since the outer dimension of the panels basically varied with the outer dimension of the panels to be framed. Document E3 was not relevant, since the frame was not molded onto the panel. The subject-matter of claims 1 and 4 was thus new.

First auxiliary request - allowability of the amendments, novelty and inventive step

A basis for the additional feature in claims 1 and 4 that the cross section of the frame was defined by the peripheral edge of the panel and the inner peripheral surface of the extrusion port was disclosed in column 5, lines 3 to 8, of the published version of the application as filed. The amendment thus met the requirements of Article 123(2) EPC. The subject-matter of claims 1 and 4 was also new and involved an inventive step, since in the closest prior art document E11 the shape of the frame was defined in part by the templates. Removing the templates in the molding method known from document E11 was not possible, since the templates partly defined the molding space, and served to guide the injection nozzle while it moved around the

panel.

At the end of the oral proceedings, the representative of the appellant presented the following written declaration to be annexed to the minutes:

In the invention the cross section of the frame is defined by the extrusion orifice and the outer edge of the panel. Therefore there must be any engagement (very narrow distance) between the inner face of the extrusion port and the peripheral edge of the panel, otherwise material would leak out.

The cross section of the molding space is defining the cross section of the frame.

V. The respondent argued essentially as follows:

Reinstating broader claims in appeal proceedings than the claims defended before the Opposition Division?

The filing of the new main request before the Opposition Division had the effect that the former main request was replaced, i.e. withdrawn. The broader requests were not the subject of the decision under appeal, since the decision under appeal did not contain a reasoned statement about the claims as granted. Such reasoning was required if said claims were to be the subject of the decision under appeal, cf. Rule 68(2) EPC. The appellant was only adversely affected within the meaning of Article 107 EPC to the extent that his main request before the Opposition Division was rejected. The Enlarged Board of Appeal had ruled in decision G 9/91 (cf. point 18 of the Reasons) that the

purpose of the appeal procedure was to give the losing party the possibility of challenging the decision of the Opposition Division on its merits. This principle was violated if new claims were accepted. This principle was reiterated in decision G 9/92 (cf. point 9 of the Reasons), where the Enlarged Board stated that the aim of an appeal was to eliminate an "adverse effect", and that the appeal could not be simply regarded as a means of commencing the proceedings. By requesting that broader claims be considered, the appellant was aiming at eliminating an "adverse effect" beyond that caused by the decision under appeal. The appellant was in fact starting a fresh case. If the Board were to allow claims that were not the subject of the decision under appeal, the right to have requests considered by two instances would be violated.

Inadmissible extension in claim 1 of the main request (claim 1 as granted)?

The deletion of the feature "engaging a part of the peripheral edge of said panel into said extrusion port of said molding die means", which was present in claim 1 as filed, was contrary to the requirements of Article 123(2) EPC. There was no disclosure in the application as filed that the invention can be performed without the panel being inserted into the extrusion port. The aforementioned feature was also essential in that its omission in claim 1 left open, whether the frame was produced directly on the panel, or was formed separately and then applied to the panel. For the latter interpretation of claim 1 there was no disclosure in the application documents as filed. Hence the scope of claim 1 was inadmissibly extended.

Main request - novelty

The subject-matter of claims 1 and 4 lacked novelty with respect to document E11. Moreover, this document addressed the same problem as the problem in the invention, namely to provide a method and an apparatus for making a panel unit which eliminated the problem of the size variation. Also documents E3 and E8 substantially disclosed all the features of claims 1 and 4, respectively.

First auxiliary request - allowability of the amendments, novelty and inventive step

The additional feature in claims 1 and 4 was only disclosed for the case that the panel was inserted into the extrusion port. Moreover, the alleged basis for the disclosure, i.e. column 5, lines 3 to 8 of the patent application as filed (published A-version), recited that the *molding space*, and not the cross section of the frame, was defined by the panel and by an inner surface of the extrusion port. Consequently, the amendment contravened Article 123(2) EPC. The term "defined by" should not be interpreted as "exclusively defined by". With respect to inventive step, the closest prior art document was document E11. Starting from the molding method known from document E11, the problem to be solved was to provide a simpler extrusion port. The person skilled in the art was aware of the extrusion port known from document E8, which was simpler in terms of design. The inner surface of this extrusion port defined, together with the cross section of the edge of the panel, the shape of the frame. The subject-matter of claim 1 thus lacked an inventive step, contrary to Article 56 EPC.

Reasons for the Decision

1. The appeal is admissible.
2. *Procedural matter*

According to decision T 123/85 (OJ EPO 1989, 336), a patent proprietor requesting maintenance of his patent in a limited form does not, by virtue of such limitation, irrevocably abandon subject-matter covered by the patent as granted, but not by the request as thus limited. According to that decision, the patent proprietor may even reinstate the patent in the form it was granted, provided this does not constitute an abuse of procedural law. By way of contrast, from decision T 840/93 (OJ EPO 1996, 335) it follows that, in appeal proceedings, the patent proprietor who lodged an admissible appeal has the right to have the rejected requests reconsidered by the competent Board, and that if the patent proprietor and appellant wants other requests to be considered, admission of these requests is a matter of discretion of that Board, and is not a matter of right.

During opposition proceedings, the appellant initially requested that the opposition be rejected, which is tantamount to requesting the maintenance of the patent as granted. It was only in response to the ground of opposition pursuant to Article 100 (c) EPC, raised by the respondent for the first time during oral proceedings before the Opposition Division, that the appellant submitted a limited version of claims 1 to 8 as main request. Thus, in the Board's judgement, the fact that the main request of the appellant aims at

reinstating the patent in suit in the form it was granted may not be considered an abuse of procedural law, and the admittance of this request into the appeal proceedings is also justified in view of the findings in decision T 840/93 (cf. supra).

The main request of the appellant is thus admitted into the proceedings. This applies *mutatis mutandis* to the auxiliary request, which was filed with a view to overcoming a novelty objection.

Main request (claims as granted)

3. *Inadmissible extension of claim 1 during the examination proceedings?*

3.1 The respondent has argued that the step "engaging a part of the peripheral edge of said panel into said extrusion port of said molding die means", which was present in claim 1 of the application as filed, and which is no longer present in claim 1 as granted, should be reinstated in the claim, since its "deletion" was contrary to the requirements of Article 123(2) EPC.

3.2 Claim 1 as granted recites that a panel unit, comprising a panel and a frame on and around a peripheral edge of the panel, is manufactured by "extruding molding material from said extrusion port (21) to produce a frame (5) ... formed on said peripheral edge of the panel (3)". For the person skilled in the art this implies that the peripheral edge of the panel, or at least a part of it, must be brought into an operable position with respect to the extrusion port, or vice versa, before extruding can commence. In other words, the edge of the panel and the

extrusion port must be "engaged" with each other.

In the Board's judgement, the wording of the claim leaves no doubt that the frame is extruded *in situ*, and formed directly on the edge of the panel. The claim does not encompass methods whereby the frame is produced in a separate step, or at a distance remote from the panel, as alleged by the respondent.

The gist of the invention is that the edge of the panel is moved relative to the extrusion port of the molding die means along a *predetermined* orbital path. The person skilled in the art will readily realize that it is not essential for the performance of the invention that the edge of the panel is inserted into the extrusion port. This is confirmed by the wording of the apparatus claim 4 of the application as filed, which merely requires that the extrusion port is *engageable with* the peripheral edge of the panel, and by the description, column 3, line 32, to column 4, line 13, of the published version of the application as filed.

In decision T 331/87 (OJ EPO 1991, 22) the Board held (cf. point 6 of the Reasons) that the removal of a feature from a claim does not offend against Article 123(2) EPC if the skilled person directly and unambiguously recognised that (i) the feature is not explained as essential in the disclosure, (ii) it is not, as such, indispensable for the function of the invention in the light of the technical problem it serves to solve, and (iii) the replacement or removal requires no real modification of other features to compensate for the change.

Since all criteria are fulfilled in the present case,

the Board has come to the conclusion that claim 1 as granted does not contravene the requirements of Article 123(2) EPC.

- 3.3 It was not necessary for the Board to rely on the written declaration of the representative of the appellant presented during oral proceedings before the Board (see Summary of Facts and Submissions, point IV) to arrive at the above conclusion.

4. *Novelty*

Document E11 discloses a method of manufacturing a panel unit, whereby templates are put around the peripheral edge of the panel, and molding material is "injected" on and around an edge of a panel by moving an "injection" nozzle along a path (pre)determined by the templates, thus producing a frame on a panel (cf. Figure 1, and page 7, line 8, to page 9, line 26).

The templates extend beyond the boundary of the panel. The injection nozzle ("Spritzdüse"), indicated by the reference numeral (18) in Figure 5 of document E11, has a flat surface. This surface is pressed against the two peripheral edges of the templates, as the injection nozzle moves around the templates, so that the space between the templates and the panel is filled with molding material and simultaneously smoothed out. The injection nozzle is equipped with three ports (23, 24) through which the molding material is pressed into the molding space. The ports lead to and end up at the flat surface of the nozzle, so that the exit openings of the ports lie in the plane of the flat surface.

The molding process according to document E11 is not a

classical injection molding process, since, firstly, the molding space is not closed, and, secondly, a surface of the nozzle is used to shape the molding mass. These two characteristics imply that the molding technique used in document E11 is rather an extrusion process.

In the Board's judgement, the flat surface comprising the ports (23, 24) corresponds functionally to the extrusion port according to the invention.

It is not immediately evident that the frame (5) shown in Figure 1 of document E11, which is apparently produced by moving the nozzle clockwise along the peripheral edges of the templates, starting from the lower left hand side corner up to and around the lower right hand side corner, can be made in a continuous manner, since the lower right hand side corner has a right-angled corner. Claim 1 as granted however does not require that the "orbital path" is a closed orbital path (as is evident from Figure 1 of the patent in suit). Since at least three sides of the frames can be produced in a continuous manner, which together qualify as a "frame on and around the panel", the Board is satisfied that document E11 discloses that said frame is continuously formed. This view has been confirmed by the appellant.

Consequently, the subject-matter of claim 1 lacks novelty within the meaning of Article 54 EPC with respect to document E11.

Therefore, the main request is not allowable.

Auxiliary request 1

5. *Allowability of the amendments*

5.1 Claims 1 and 4 according to the first auxiliary request essentially differ from claims 1 and 4 as granted in that the following feature has been added: "such that the cross section of the frame is defined by the peripheral edge of the panel (3) and an inner peripheral surface of the extrusion port (21)".

A basis for this amendment can be found in the passage in column 5, lines 3 to 8, of the published version of the application as filed. The respondent has argued that the added feature was only disclosed in combination with the feature that the panel must be inserted into the extrusion port, since the passage in question was part of the description of the preferred embodiment shown in Figures 4 to 11. Consequently, the amendment contravened Article 123(2) EPC.

As explained under point 3 above, the Board is of the opinion that, for the invention in its broadest aspect, a requirement that the panel must be inserted into the extrusion port is not described as mandatory in the application as filed. The additional feature in claims 1 and 4 of the first auxiliary request merely emphasizes that a frame is formed in situ without the need of setting the panel within a pair of moulding dies, and without the need to use templates. All that is needed to form a frame having a cross section that is defined by the peripheral edge of the panel and by an inner peripheral surface of the extrusion port, is that the edge of the panel and the extrusion port must be engaged with each other. If a frame is formed on top of the upper surface of the panel, and along the

peripheral side edge of the panel, but not on the lower surface of the panel, such a frame can be formed without inserting the panel "into" the extrusion port.

A second objection raised by the respondent is that in the cited passage the *molding space* - rather than the cross section of the frame - is said to be defined by the peripheral edge of the panel and by an inner peripheral surface of the extrusion port.

In the view of the Board, the skilled reader can only understand the cited passage as meaning that during extrusion, when the panel is engaged with the extrusion port, the cross section of the *available* molding space, viz. the cross section of the extrusion port minus the cross section of the edge of the panel, corresponds to the cross section of the frame.

Hence, there is no contradiction. It is also noted that the expression "is defined by" means exactly that. Contrary to the opinion of the respondent, there are no other surfaces than the ones defined in claims 1 and 4 that shape the cross section of the frame.

The amendment thus meets the requirement of Article 123(2) EPC.

Since the added feature results in a restriction of the protection conferred by the claims, the requirement of Article 123(3) EPC is also met.

5.2 The subject-matter of the amended claims 1 and 4 is also clear and concise, and supported by the description, so that the requirements of Article 84 EPC are met as well.

- 5.3 Apart from the deletion of the reference to claim 1 in dependent claim 3, the dependent claims 2 to 3 and 5 to 8 have not been amended.

The wording in the description (cf. new page 2 of the patent specification filed on 2 February 1999) is in conformity with the claims of the first auxiliary request.

The respondent objected to the amended description, because in his opinion the objective problem to be solved by the invention was no longer the object that was stated in column 1, lines 47 to 53, of the patent in suit as granted, but was to provide a simpler extrusion port, starting out from the method and apparatus known from document E11. In view of the assessment of inventive step as set out under point 7 below, the Board does not share this opinion.

6. *Novelty*

None of the cited documents disclose a method and an apparatus for manufacturing a panel unit with all the features of claims 1 and 4, respectively. Since this was no longer disputed, there is no need for further substantiation of this matter.

The subject-matter of claims 1 and 4 is therefore novel within the meaning of Article 54 EPC.

7. *Inventive step*

- 7.1 The invention relates to a method and an apparatus of manufacturing a panel unit, whereby molding material is extruded on and around an edge of a panel, thus

producing a frame on a panel. A problem that is encountered in the prior art is, when a frame having a uniform thickness is extruded onto and in contact with the side edge of the panel, that variations in the size of the *panel* result in *panel units* having different sizes. The problem that variations in panel size may give rise to corresponding variations in the size of the final product is referred to as *the size variation problem*.

The invention seeks to provide a method and an apparatus for manufacturing a panel unit comprising a panel and a frame, which allows accommodation of minor variations in size of the panel so that the resulting panel unit is of a predetermined uniform size, which can eliminate the awkward operation of mounting a frame on the peripheral edge of a panel in a separate step, and which can be performed without having to take recourse to molding dies, cf. column 1, lines 20 to 38 and 47 to 53, and column 2, lines 36 to 41, of the patent in suit as granted.

This problem is solved by the subject-matter of claims 1 and 4, respectively. In particular, the edge of the panel is moved relative to the extrusion port of the molding die means along a *predetermined* orbital path, while molding material is extruded, whereby the shape of the formed frame is defined by the inner surface of the extrusion port and the peripheral edge of the panel. The orbital path is chosen such that a panel unit with a predetermined external size is produced, it is not necessarily a path that follows the contour of the panel.

7.2 The *size variation problem* arises in manufacturing

methods for producing panel units, whereby the frame is formed in situ by extruding molding material on or close to the edge of the panel.

If panel units are produced according to injection molding techniques, the panel is introduced within a pair of molding dies, the internal size of which corresponds to the external size of the frame. This technique does of course not give rise to the size variation problem, since the external size of the panel unit corresponds to the internal size of the molding dies, not of the panels. Drawbacks of this technique are that the costs of molding dies are high, that the panels can be damaged when closing the dies, see column 1, lines 20 to 38, of the patent in suit as granted.

A "hybrid" technique is disclosed in document E11, wherein templates are put around the peripheral edge of the panel, and the extrusion port of the injection (extrusion) nozzle (18) is moved along an orbital path determined by the templates.

- 7.3 In the Board's judgement, document E11 can be regarded as the closest prior art. This is the only document of the cited documents, wherein the *size variation problem* is addressed (see page 5, second full paragraph). The *size variation problem* is also solved in document E11, it is solved by the provision of the templates, which are effectively used as "molding dies". The shape of the frame is defined by the templates, by the flat surface of the injection nozzle, and by the peripheral edge of the panel.

By way of contrast, the invention requires that the

cross section of the frame be defined by the peripheral edge of the panel and by an inner peripheral surface of the extrusion port.

- 7.4 The respondent has argued that the skilled person would realize that the design of an injection nozzle having a flat surface, and acting in cooperation with the templates, as known from document E11, was complicated, and would look for a simpler nozzle design. He or she would find such a nozzle in document E8, which disclosed an extrusion port capable of forming a frame without using templates as molding dies. It was obvious for the skilled person to employ the extrusion port known from document E8 in the method known from document E11, without sacrificing the basic idea of document E11, i.e. to move the extrusion port relative to the edge of the panel along a predetermined orbital path.

This argument cannot be accepted by the Board. The only way to arrive at the invention, when one starts from the method known from document E11, is to delete the templates (at least in so far as the templates shape the frame).

Deleting the templates in document E11 would result in a method, which no longer solves the problem posed in that document. Deleting the templates altogether, or modifying them in such a way that they are no longer used as templates (shaping the frame) but merely as objects that define an orbital path for the nozzle, would go against the teaching of document E11.

- 7.5 It follows from the above that the person skilled in the art, starting from the method known from document

E11, or from any other of the cited documents, would not arrive at the subject-matter of claim 1 in an obvious manner.

Consequently, the subject-matter of claim 1 involves an inventive step.

The same applies to claim 4, which concerns an apparatus for manufacturing a panel unit. The subject-matter of claims 2 to 3 and claims 5 to 8, which are appendant to the claims 1 and 4, respectively, similarly involve an inventive step.

7.6 Therefore, the request of the appellant that the patent be maintained on the basis of the documents filed as first auxiliary request is allowable.

It is, accordingly, not necessary to consider the second to fourth auxiliary requests of the appellant.

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:
 - (a) claims 1 to 8 submitted as first auxiliary request during oral proceedings;
 - (b) description: page 2 submitted during oral

proceedings before the Opposition Division on
2 February 1999, and pages 3 to 7, and 8,
column 13, lines 1 to 15, as granted;

(c) drawings: Figures 1 to 19 as granted.

The Registrar:

The Chairman:

M. Dainese

W. Moser