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Boards of Appeal

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Chambres de recours



Case Number : T 293 /88 - 3.2.2

D E C I S I O N
of 26 November 1990 correcting errors in the decision
of the Technical Board of Appeal 3.2.2
of 23 March 1990

Appellant : DAN-PAL Technical Plastic Industry
(Proprietor of the patent) for Building and Industry
Kibbutz Dan Upper Galilee (IL)

Representative : Lawson, David Glynne
Marks & Clerk
57-60 Lincoln's Inn Fields
London WC2A 3LS (GB)

Respondent : Röhm GmbH Chemische Fabrik
(Opponent) Postfach 4242
6100 Darmstadt 1 (DE)

Representative : ---

Decision under appeal : Decision of Opposition Division of the European
Patent Office dated 26 April 1988 revoking
European patent No. 0 050 462 pursuant to
Article 102(1) EPC.

Composition of the Board :

Chairman : G. Szabo
Members : K. Stamm
O. Bossung

In application of Rule 89 EPC the Decision given on
23 March 1990 is hereby corrected as follows:

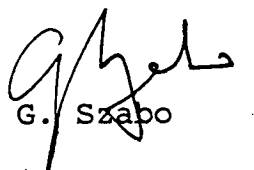
page 13, last line: replace "VI." by "VII."

The Registrar

The Chairman



S. Fabiani



G. Szabo

Sm 26.4.90

Veröffentlichung im Amtsblatt	Ja/No/In
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Aktenzeichen / Case Number / N^o du recours : T 293/88 - 3.2.2

Anmeldenummer / Filing No / N^o de la demande : 81 304 745.3

Veröffentlichungs-Nr. / Publication No / N^o de la publication : 50 462

Bezeichnung der Erfindung: Light transmitting wall panels

Title of invention:

Titre de l'invention :

Klassifikation / Classification / Classement :

ENTSCHEIDUNG / DECISION

vom / of / du 23 March 1990

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent /
Titulaire du brevet : DAN-PAL Technical Plastic Industry for
Building and Industry

Einsprechender / Opponent / Opposant : Röhm GmbH Chemische Fabrik

Stichwort / Headword / Référence : Light transmitting wall panels

EPÜ / EPC / CBE Articles 56, 113(1) and 114(1)

Schlagwort / Keyword / Mot clé : "Inventive step - (yes)" - "argumentation
ex post"
"Opposition procedure - Examination of claims
not objected to by the Opponent - Power and
obligation of the Opposition Division"
"Reimbursement of Appeal fees - (yes)"

Leitsatz / Headnote / Sommaire

Headnote follows



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Summary of Facts and Submissions

- I. European patent No. 50 462 was granted on 9 January 1985 with one independent and nine dependent claims in response to the European application No. 81 304 745.3, filed on 12 October 1981.
- II. A Notice of Opposition was filed against the European patent on 7 October 1985. The revocation of the patent was requested on the grounds of lack of inventive step. The following documents were cited:
- (1) DE-A-2 243 972
 - (2) DE-A-2 808 155
 - (3) DE-A-1 609 777.
- III. In its decision of 26 April 1988 the Opposition Division revoked the patent because of lack of inventive step. The subject-matter of Claim 1 was, in the view of the Opposition Division, obvious to the skilled man when he started from document (1), disclosing a U-shaped panel made of glass. The differing features would be a consequence of general knowledge of the skilled man, as regards replacement of glass by plastics material. Joining of plastics panels without the interposition of elastic elements were well known in the art as showed the documents cited in the search report.

Referring to the dependent Claims, including Claims 4 and 5, the decision states, they would not reveal any features which in combination with the subject-matter of Claim 1 could form the basis of a new and acceptable Claim 1, since the features were either known from prior art documents or would fall within the normal design freedom of the skilled person.

IV. The Appellant (Proprietor) filed a Notice of Appeal received on 23 June 1988 and paid the Appeal fee. The Statement of Grounds was filed on 29 August 1988. The Appellant gave further reasons as to why Claim 1 in the revoked form was based on an inventive step.

He submitted as main request to cancel the decision of the Opposition Division, to remit the case to the Opposition Division for further prosecution according to Article 111(1) EPC and to order the reimbursement of appeal fees according to Rule 67 EPC by reason of a substantial procedural violation.

Alternatively, he requested to maintain the patent based on Set A of amended claims and to refer the case to the Enlarged Board of Appeal according to Article 112 EPC, namely with respect to the question concerning substantial procedural violation.

V. In a letter, received by telecopy on 16 March 1989 and confirmed by letter on 18 March 1989, the Respondent (Opponent) declared to accept the arguments made by the Appellant and that he did not intend to argue further in this matter.

VI. In a communication according to Article 110(2) EPC, the Board informed the Appellant, that the claims according to set A of his alternative request would appear to comprise patentable matter.

Amended Claim 1 reads as follows:

"1. An extruded modular panel unit for the construction of wall-surface portions, especially of light-transmitting wall surface portions, comprising at least two sheet-like

major surfaces (2, 4) interconnected and spaced apart by a plurality of ribs (6, 8) dividing the space delimited by the said major surfaces into a plurality of sub-spaces (10), such that in cross section the said major surfaces (2, 4) and ribs (6, 8) form a truss-like structure in which the said major surfaces constitute the chords and the ribs constitute the webs, characterised in that:

- (a) each panel has joining flanges (12) which extend in the direction of extrusion and located at each as-extruded edge of the panel, and project from an outside face of one and the same major surface and point in the same direction;
- (b) each of said joining flanges (12) has an outside as well as an inside face, each flange (12) having a said face which is adapted for making surface contact with a similar face of a flange (12) of an adjacent panel unit; and
- (c) the inside face of each of said joining flanges (12) is provided with tooth-like first detent means (16) which is suitable for engaging a separate joining member (21) adapted to be pushed over said tooth-like first detent means (16) and the first tooth-like detent means (16) of an adjacent panel thereby effecting joining thereof."

VII. The Appellant requests to maintain the patent on the basis of amended Claims 1 to 9, corresponding to "set A", and new pages 2, 3, 3a, 3b replacing column 1, line 32 after the word "the" to column 3, line 5 before the word "discussion" of the printed specification.

The Appellant also requests that in view of procedural violation the fee be reimbursed.

Reasons for the Decision

1. The Appeal meets the requirements of Articles 101 to 108 and of Rule 64 EPC and is admissible.

2. Amendments

Amended Claim 1 comprises, in combination, the subject matter of granted Claims 1, 4 and 5 and meets, therefore, the requirements of Article 123(3) EPC. The amendments do also not extend the content of the original application since they are based on original Claims 1, 4 and 5 and thus comply with Article 123(2) EPC.

3. Novelty

No cited prior document discloses all the features of Claim 1 on file. Since novelty was not contested, further remarks are not necessary relative to that question.

4. Inventive step

4.1 Nearest prior art

Document (3) discloses a panel the material and basic structure of which corresponds to the features mentioned in the prior art part of Claim 1. The width of the panels in (3) is relatively large when compared with their height. Document (3) is directed to propose various types of cross-sections adapted to be used for larger surfaces of the panels. The prior art features of Claim 1 belong in (3) to one among various types of cross-sections which are particularly adapted for forming panels of larger dimensions and, therefore, is used as starting structural material.

4.2 Problem and solution

- 4.2.1 In document (3), which forms the basis for the prior art portion of Claim 1, light-weight extruded panels are presented. There are no indications, however, as to how to join such elements when used as wall-surface portions.

The problem to be solved is, therefore, to provide extruded elements of modular design having truss-like structure as in document (3) with joining means edge-wise to form windows of any width with a glazing which is strong but extremely light-weight and, therefore, relatively inexpensive, practically unbreakable and, having integral air spaces, is inherently thermally insulative.

The solution defined in Claim 1 enables easy connection of adjacent panels and in the same time results in a structure with economical material-consumption. Owing to the special form of the composite total structure, consisting of joints and U-shaped profiles, specified in the characterising part of the claim, a considerable reduction of the cross-section is achieved.

- 4.2.2 If document (1) were taken as starting document, representing the closest state of the art, the problem to be solved would be to improve such a known U-shaped glass panel using extruded panels and thus to provide extruded elements having U-shape with joining means edge-wise to form windows of any width with a glazing which is strong but extremely light-weight and, therefore, relatively inexpensive, practically unbreakable and, having integral air spaces, is inherently thermally insulative.

The peculiar joining means according to the definition of Claim 1 also secure the solution of this problem.

4.3 Obviousness

4.3.01 The skilled man, starting from document (3), having the desire to solve the problem mentioned above, would first realize that he had to find an appropriate cross-section for his panel. The panel in (3) was especially designed to be used for larger panels and gives no teaching in respect of the forms of the edges. One of the main concerns of the skilled man is a good statical use of the material - which is a basic requirement in any appropriate design. He would therefore be obliged to take typical cross-sections into account and should recognize the widely used U-shape as principally to be investigated, since this comes next to a rectangular form and represents an improvement.

In particular he will be familiar with the special type of window-panels, having U-shaped cross-sections and consisting of glass, on which the suggestions in document (1) are based.

The principal possibility of using such a cross-section also for extruded material is thus obvious, not only because of the common general knowledge in this field, but also in view of analogy with respect to the disclosures in document (1). The competent skilled man is expected to know that the disadvantages of glass due to its brittle properties result in gaps, which are to be filled along adjacent panels in order to avoid concentration of pressure. Since it is also known that plastic materials for such use are much better than glass in respect of their considerable tensile-strength - it is as well obvious that plastic panels do not need extra measures to

fill the gaps. Extruded panels having U-shape would, therefore, be expected to be, at least, a good solution to the problem of economic material consumption in combination with excellent statical performance.

- 4.3.02 In document (1), however, no suggestions are to be found which could have directed the attention of the skilled man - in order to find a solution to his problem - to form also tooth-like detent means on the flanges of the U-shaped unit suitable for engaging separate detent means of a joining member adapted to be pushed over said means of an adjacent panel thereby effecting joining thereof - as specified under item (c) of Claim 1.
- 4.3.03 The invention solves the above mentioned problems using structural elements which imply an unexpected quality-step: The form of the detent flanges and the accordingly implied detent joining means results in the quasi-homogeneous two-dimensional structure of an orthotropic plate. This provides, in consequence, a considerable better use of the materials when compared with the known U-shaped glass-structure. U-shaped profiles are relatively slim and act under static/dynamic loads primarily as simple linear beams, i.e. in one direction only. This is primarily also the case for the elements shown in document (1), since their connections are hardly suitable for transferring shear forces from one panel to the next one. But also the rigidity of the U-shaped sections according to Claim 1 is effectively increased in the main bearing-direction by the enlarged thickness and width of the eventual total rib formed by the joined flanges and the joining pieces defined in the claim. This results in a composite structure having an increased moment of resistance.

No idea appears in document (1) which would have aimed at allowing the brackets to transfer shear forces from one panel to the next directed vertically to the main plane of the modular elements, as is the case according to Claim 1. The drawing in (1) shows at first glance that such an effect is neither possible nor could it have been intended. The engaging detent means of Claim 1 however allow such a transfer of shear forces - which is the reason of a considerable distinction in the technical quality of the claimed unit - as described under 4.3.03 above.

Therefore, document (1) contains no information which could allow a deduction of the idea to use detent means on the flange of the panel unit itself, suitable for engaging detent means on the bracket - as claimed. This constitutes the conditions for the joint which implies technical effects going considerably beyond those achieved by the cited art.

The subject-matter of Claim 1 is, therefore, not deducible from documents (3) and (1) in an obvious manner.

- 4.3.05 If document (1) were the starting point, this would slightly vary the problem shown under 4.2.2. Since the primary condition were then to use extruded panels, the teaching of both documents, viz. (1) plus (3), would have also been envisaged in combination in such case. This evidently implies that the information as a whole remains the same as observed under the above paragraphs 4.3.01 to 4.3.04.

4.3.06 As regards

- (4) DE-U-7 716 036 and
- (5) EP-A-0 006 431,

panels of rectangular cross-section are, in both cases, to be joined in such a way that after assemblage the resulting wall is limited by two fully planar surfaces, formed by the main faces of the single panels. Therefore, the joining elements are arranged within the thickness of the panels in both cases. The contact between adjacent panels takes place along the small width of the rectangular cross-section. The teaching of these documents could not therefore stimulate the skilled man to join flanges of an U-shaped profile, let alone to use the detent means as required by Claim 1.

4.3.07 Document (2) discloses a means for attaching panels to a frame or profile supporting adjacent panels. This means is to be pushed over the web of the profile and is provided with detent means for engagement of elastic parts of a cap which exerts the needed pressure upon the panels. It is, therefore, clear that the function and detailed construction of this piece is far remote from what the skilled man would envisage when trying to solve the posed problem in the present case which has nothing in common with the manner of joining adjacent panels according to the document.

4.3.08 The other cited prior art documents do not disclose matter which is more relevant than that so far discussed.

4.3.09 The apparent simplicity of the decisive features of Claim 1 suggested an obviousness argumentation in the proceedings on the basis that the claimed features would

"fall within the normal design freedom", in other words within the design variations freely available to the skilled man.

Such a statement is a mere commonplace without reasons as to why the skilled man would have been expected to bring the features in question into focus. Otherwise such an allegation would only reflect an attitude that the features in question are assumed as already given for the purpose, which is an ex post argumentation. In the present case, the provision of inside face of the joining flanges with tooth-like detent means is a feature which has at first to be regarded as not yet given, since no cited prior art document discloses such a feature in the given context, or, when it comes to general knowledge, in an analogous context. It has been suggested that what is known in this regard is disclosed in document (2), where similar detent means are shown. Their technical function is, however, only to provide a kind of nailing effect in order to fix panels, exerting pressure on the panels so that those remain under tensile stress.

However, among the various possibilities to solve the posed problem - providing brackets as in (1), e.g. having adapted shape - it appears that the skilled man could find numerous solutions solving the posed problem adequately without turning to the idea of the cooperating detent means as claimed. The known documents did clearly not imply any teaching involving a structural shear-resistance between the the bracket and the flanges of the U-profile according to the claimed panels - as explained in more detail above under 4.3.03 and 4.3.04. There is, therefore, no apparent reason for the skilled man to derive detent means in an obvious way from the cited prior art and incorporate those in the known solution.

The Board is thus of the opinion that the above argumentation of obviousness lacks sufficient reasoning and cannot be followed.

4.3.10 In view of the above the Board comes to the conclusion that the subject-matter of Claim 1 is not to be considered as obvious by the skilled man - conscious of the problem to be solved - having regard to the cited documents, even when combined - in the sense of Article 56 EPC and that it is patentable according to Article 52.

4.3.11 No objections are raised against dependent Claims 2 to 9.

5. Reimbursement of appeal fee

In its Counterstatement the Proprietor of the patent submitted in the opposition proceedings an auxiliary set of claims ("A"), with minor modifications in order to comply with Rule 29(1) EPC, and later on a second set ("B") without further modifications on the main claims. Thus, in effect, the proprietor defended the subject-matter of Claim 1 without introducing amendments at that level. No request for an oral proceeding was submitted by either of the parties, and the Opposition Division was therefore entitled to come to a conclusion on that particular point on the basis of the submissions and the text agreed by the proprietor.

However, in his Counterstatement the Proprietor made it clear that he requested maintenance "with the claims as published or with possible amended claims to be determined in the course of the opposition proceedings."

The decision of the Opposition Division to revoke the patent without issuing any communication in advance disregards the fact that validity at another level was not challenged at all, and a further opportunity to fall back at least to such position was reasonably to be expected in such circumstances.

- 5.2 During the opposition procedure the Respondent (Opponent) only challenged the validity of Claims 1 to 6 and 8. Thus, the validity of dependent Claims 7, 9 and 10 was not an issue raised in the proceedings. The features of these claims contain additional features which were not disclosed in any documents and were thereby representing subject-matter not necessarily standing or falling together with other features of broader claims under discussion.

It is the view of the Board in this respect that the Opposition Division should assume the prima facie validity of dependent claims which have not been objected to by the Opponent at any stage. The Opposition Division has no reason to doubt the validity of the examination of undisputed claims before grant unless specific circumstances have emerged in consequence of evident technical facts not to be neglected or submissions in the proceedings (cf. also Guidelines D.V-2). It may also investigate the validity of such claims which are in the same category as those attacked in the opposition proceedings, within its own discretion under Article 114(1) EPC, provided their validity is necessarily and directly prejudiced.

- 5.3 The situation in the present case is distinguished from that in the decision of case T 9/87, "Zeolites ICI", (to be published) where the Board doubts the obligation and even the power of the Opposition Division to investigate

further matters. That case related in fact to unattacked claims of a different category, involving inventions of a different kind, and not, as in the present case, to claims which relate only to dependent narrower aspects of the same subject-matter.

- 5.4 However, the onus of raising such closely related additional matter with the parties is on the Opposition Division under Article 113(1) EPC. It failed to point out, in a Communication to the parties, its position with regard to Claims 7, 9 and 10, which were not challenged. Since the patent might have been maintained in an amended form on the basis of such claims at that stage in the absence of specific objections on the part of the Examining Division, the failure to inform all concerned was a substantial procedural violation, a reimbursement of the appeal fee is justified.
6. To refer the case to the Enlarged Board of Appeal is in the view of the Board - with regard to point 5. above - not justified.

Order

For these reasons, it is decided that:

1. The contested division of the Opposition Division is set aside.
2. The case is remitted to the Opposition Division with the order to maintain the patent on the basis of the published patent with amendments according to the documents mentioned under VII. above.

3. Reimbursement of the appeal fee is ordered.

The Registrar:

S. Fabiani

S. Fabiani

The Chairman:

G. Szabo
G. Szabo

31.5.90 *Su*

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