Datasheet for the decision
of 4 October 2006

Case Number: T 0927/05 - 3.2.07
Application Number: 96939948.4
Publication Number: 0818287
IPC: B28B 7/10
Language of the proceedings: EN
Title of invention:
Mold for prefabricated concrete panels
Patentee:
Solana Gomez, Vicente
Opponent:
PREFABRICADOS ESCALENTE, S.A.

Headword:

Relevant legal provisions:
EPC Art. 56, 113(1), 133(3), 134(1)

Keyword:
"Representation by an employee (no)"
"Breach of the right to be heard (no)"
"Inventive step (yes)"

Decisions cited:
G 0004/92, T 0484/90, T 0439/91

Catchword:
Case Number: T 0927/05 - 3.2.07

DECESSION
of the Technical Board of Appeal 3.2.07
of 4 October 2006

Appellant: PREFABRICADOS ESCALENTE, S.A.
(Opponent)
Carretera al Portillo, S/N
E-39795 ESCALENTE (Cantabria) (ES)

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Respondent: Solana Gomez, Vicente
(Patent Proprietor)
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 20 May 2005 rejecting the opposition filed against European patent No. 0818287 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: C. Holtz
Members: K. Poalas
H. Hahn
Summary of Facts and Submissions

I. The Appellant (Opponent) lodged an appeal against the decision of the Opposition Division on the rejection of the opposition against the European patent No. 0 818 287. Opposition was filed against the patent as a whole based on Article 100(a) EPC (lack of novelty and lack of inventive step).

The Opposition Division held that the grounds for opposition mentioned in Article 100(a) EPC did not prejudice the maintenance of the patent as granted.

II. The Appellant requested that the decision under appeal be set aside and the patent revoked. The Appellant further requested that the oral proceedings before the Opposition Division be repeated or that it should be given an opportunity to respond to the other party's arguments given in those oral proceedings.

III. The Respondent (Patentee) requested that the appeal be dismissed.

IV. None of the parties requested oral proceedings.

V. In its communication under Article 110(2) EPC dated 6 April 2006 the Board of Appeal informed the parties about its preliminary opinion to dismiss the appeal and gave also the grounds for its preliminary opinion. Within the time limit set by the Board no response from the parties to said communication was filed.
VI. Independent claim 1 of the patent in suit as granted reads as follows:

"A mold for the production of reinforced or prestressed concrete panels having an inverted channel concrete section with a strictly rectangular external form, having plane parallel lateral sides in order to form longitudinal ribs with plane parallel lateral sides, that part of the mold defining the inside panel section being formed such that the longitudinal ribs have a variable width, characterized in that the mold is of the type "mold in one piece", and that two linear stiff linear elements (1) of triangular shaped section with a right angle are provided inside the mold in a way such that the right angle edge of each element lies on the edge of the corner between the plane lateral side and the underside of the rib forming part of the mold."

VII. The following documents are mentioned in the present decision:


D6: Fundamentals of building construction, materials and methods, page 525

D7: Forjados y losas de piso, Dr. Geronimo Lozano Apolo, Oviedo 1977, pages 281-287, 298, 300, 304, 309

D9: DE 43 33 080 A

D10: FR 53.476 E

D13: Guide to Premix Manufacture

D15: a copy of a decision of the Spanish patent office, which copy concerns the nullification of a Spanish patent and two additions in the name of Vicente Solana Gomez, who is the patent proprietor of the patent-in-suit.

VIII. The Appellant argued essentially as follows:

(a) Rejection of Mr. Arroyo as representative of the Opponent according to Article 133(3) EPC

The meaning of the word "employee" has been interpreted by the Opposition Division in a very narrow sense, as "worker", excluding the professionals that do services for the company, as it could be understood.

As Mr. Arroyo declared and was accepted, he was engaged for the case and works for the Opponent occasionally on a sporadic basis. According to American Heritage® Dictionary of the English Language an employee is "a person who works for another in return for financial or other compensation". In that sense Mr. Arroyo is an employee of the Opponent and he was a legal representative of the Opponent and his participation at the oral proceedings should have been accepted by the Opposition Division.
(b) *Breach of the right to be heard, Article 113(1) EPC*

As the Opponent's representation was rejected, the procedural fairness was breached and the Opponent could not respond to the arguments offered by the patent proprietor, in defence of the patent, concerning the lack of inventive step in the claim 1. Its right to be heard in accordance with Article 113(1) EPC had been breached. The oral proceedings should therefore be repeated or, at least, it should be given to the Opponent a new opportunity for arguing on the remarks and arguments given by the Patentee at the oral proceedings, see G 4/92, T 484/90, and T 439/91.

(c) *Admittance of documents D13 and D15 into the proceedings*

The Opposition Division should have allowed the introduction of documents D13 and D15 into the opposition proceedings.

(d) *Inventive step, Article 56 EPC*

The Opposition Division did not follow the "problem-solution-approach" in the present case.

According to the Opposition Division's decision the closest prior art includes D1 and D6, in which the "mold in one piece" is recognized and D9, that discloses "triangular linear stiff elements".

The patent is a new combination of three known features: (i) mold in single piece, (ii) linear stiff triangular elements in the corner of the molds and (iii) shape of
the mold consisting in inverted channel cross section and plane rectangular sides. There are examples in the prior art that cover the three characteristic features of the patent.

The objective technical problem is exposed in paragraph [0016] of the patent specification.

There is no functional reciprocity between the three known features coalescing in the patent. Nor is there any specific synergy between the triangular stiff elements placed in the corners of the mold and the single piece mold. Linear stiff elements are usually employed as a casting out aid and have no specific connection with single piece molds. This technique to ease casting out is identical for all the cases in which the pieces should be lifted, regardless of the shape of the pieces and regardless of the type of mold. That is shown in D11.

The patent is a mere juxtaposition of well known features. Since no combined effect can be claimed as evidence of inventive step it must be seen whether the three groups of features, taken separately, are derived in an obvious way from the prior art and if they are obvious for the skilled person.

1) Molds in one piece are well known, and the skilled person would be perfectly aware of their potential application to panel casting. When it is planned to regularly manufacture panels with the same dimensions, the option for a single piece-mold is obvious.
2) The provision, within the mold, of linear stiff elements of a triangular shaped section with a right angle for obtaining bevelled edges is also obvious for the skilled person. It is a very well known technique as described in D11, page 18: "Where leads or draws are undesirable because of the function of the finished unit, the molds themselves can have inbuilt stripping fillets". As described in the same document, the advantages of this technique are various: ease demolding, aesthetic finishing, adequate mold filling. These various advantages make the technique very commonplace in all sort of casting processes.

3) The cross channel inverted section of the mold is also obvious, as this is precisely the target shape of the panel: that the shape of the mold defines the shape of the object manufactured within the mold is obvious for a child playing with plasticine.

IX. The Respondent argued essentially as follows:

(a) Rejection of Mr. Arroyo as representative of the Opponent according to Article 133(3) EPC

By the Appellant's interpretation of Article 133(3) EPC, anyone asked by a natural or legal person (having its residence or principal place of business within the territory of one of the contracting states) to act on its behalf before the European Patent Office in return for financial or some other compensation would have to be regarded as an employee — simply by virtue of having been asked to act in return for that compensation — and could thus perform all functions which are otherwise
performed by professional representatives within the meaning of Article 134(1) EPC.

This interpretation would obviously render the provision of Article 134(1) EPC essentially meaningless. Therefore, such an interpretation is clearly to be rejected.

Article 133(3) EPC allows an employee of a legal person to act on behalf of that person as if it was an "organ" thereof, such as a member of the administrative board or a managing director. Therefore, this provision constitutes an exception from the general principle that legal persons can only act through their "organs" which are empowered accordingly by virtue of the (national) laws governing that legal person. It is a general principle of the interpretation of legal texts that provisions constituting exceptions should be interpreted narrowly. This is a further reason why the Appellant's wide interpretation of the expression "employee" is to be rejected.

(b) *Breach of the right to be heard, Article 113(1) EPC*

The rejection of Mr. Arroyo Alvarez de Toledo does not constitute a violation of the Opponent's right to be heard. The Opponent was duly summoned to the oral proceedings and could have sent a properly authorised representative. The fact that it chose not to do so is equivalent to not appearing at all at the oral proceedings. Article 113(1) EPC only requires that "the parties concerned have had an opportunity to present their comments". The Opponent has clearly had such an
opportunity, but decided not to use it. Therefore, there has been no breach of the right to be heard.

(c) Inventive step, Article 56 EPC

A mold according to the preamble of claim 1 is known from document D1.

The objective technical problem solved by the invention of the opposed patent is to provide a mold for the production of reinforced or prestressed concrete panels having an inverted channel concrete section with strictly rectangular external form, which makes it possible to produce such panels faster and with greater efficiency and economy.

Document D6 describes the manufacture of certain precast concrete structural elements. D6 does not relate to the production of reinforced or prestressed concrete panels having an inverted channel concrete section with a strictly rectangular external form. Moreover, this document does not at all discuss any advantages in using a mold in one piece. On the contrary, this document is primarily concerned with the dimensions of the mold and the use and positioning of high-strength steel reinforcing strands in such a mold. Therefore, this document would not have given the skilled person seeking to solve the aforementioned objective technical problem any motivation to modify the mold known from the closest prior art so as to arrive at the mold of the opposed patent.

D9 describes a mold for the production of cast concrete slabs of cuboid shape. Moreover, the mold described in
D9 is clearly not a "mold in one piece" because the side walls thereof are to be retracted for extraction of the cast concrete slab. Figure 1 of D9 shows what appears to be a triangular element in the corner between the bottom and the side wall of the mold and mentions in the sentence bridging columns 2 and 3 that a "Fase" is formed along the edge of the concrete slab. However, D9 contains no information as to the reason why such a triangular element or such a "Fase" should be provided.

The Appellant's further allegation that "there are examples in the prior art that cover the three characteristic features of the patent" is entirely unsupported.

It is clearly not sufficient to show that a combination of all features recited in a claim can be obtained by formalistically "combining" the disclosure of various prior art documents. This is all the more true in the present case where the Appellant relies on a combination of three documents. What is actually required is a consideration of whether the skilled person starting from the closest prior art and trying to solve the objective technical problem underlying the invention would — not just could, but would — have used the information in the prior art in order to arrive at the claimed invention. This is clearly not the case here.

Prior art documents D6 and D9 are not at all concerned with the production of panels having an inverted channel concrete section with a strictly rectangular external form. D6 does not refer to the speed,
efficiency or economy of production. Moreover, D9 does relate to the ease of extraction of a cast element from a mold, but does not disclose linear stiff elements of triangular shaped section in that context. Therefore, neither D6 nor D9 provides a teaching which would have motivated the skilled person to modify the mold known from D1 for the production of concrete panels having an inverted channel concrete section with a strictly rectangular external form so as to arrive at the mold of the opposed patent.

Moreover, the Appellant is clearly wrong in arguing that the afore-mentioned three features are merely an aggregation or juxtaposition with no functional reciprocity or synergy.

Prior art document D11, which the Opponent also cites, does not justify any different conclusion because, as the Opposition Division correctly observed, see page 9 of the impugned decision, neither a "mold in one piece", nor triangular elements in the mold corners are shown in this document.

**Reasons for the Decision**

1. **Rejection of Mr. Arroyo as representative of the Opponent according to Article 133(3) EPC**

According to paragraph 2.1 of the Minutes of the oral proceedings of 24 April 2005, Mr. Arroyo asked by the chairman of the Opposition Division stated that "he is neither an authorised representative before the EPO,
nor a legal practitioner, nor an employee of the company" (emphasis added).

The Appellant did not file any objections to the content of these minutes.

The Board considers that on the basis of the statement of Mr. Arroyo, that he was not an employee of the company PREFABRICADOS ESCALANTE S.A., the Opposition Division had no need and no space neither for a narrow nor for a broad interpretation of the term "employee" disclosed in Article 133(3) EPC as requested by the Appellant, since according to his own statement, Mr. Arroyo was not an Opponent's employee.

In the Board's view the Opposition Division then decided correctly that Mr. Arroyo was not entitled to represent the Opponent in the sense of Article 133(3) EPC. Consequently, he was not allowed to present any arguments or documents for the Opponent during the oral proceedings.

Furthermore, the Board agrees with the Respondent's arguments, that a simple authorisation to a person being neither an authorised representative before the EPO nor a legal practitioner nor an employee of the Opponent to act in a single case would render Article 134(1) EPC largely meaningless, which obviously was not intended.

Hence, the Opposition Division's decision not to allow Mr. Arroyo to represent the Opponent during the oral proceedings in the sense of Article 133(3) EPC was correct.
2. *Breach of the right to be heard, Article 113(1) EPC*

The Board considers that the rejection of Mr. Arroyo does not constitute a violation of the Opponent's right to be heard for the following reasons:

Opponent PREFABRICADOS ESCALANTE S.A., which is a legal person was duly summoned to the oral proceedings and could have sent either a professional representative or a properly authorised employee. The fact that it choose not to do so is equivalent to not at all appearing at the oral proceedings. Article 113(1) EPC only requires that "the parties concerned have had an opportunity to present their comments". The Opponent has clearly had such an opportunity, but decided not to use it.

In the present case the Appellant criticises that a new argument presented by the Patentee for the first time during the oral proceedings before the Opposition Division was adopted by the Opposition Division in its reasons for the decision.

The Board notes that the decisions cited by the Appellant being in line with Article 113(1) EPC require that a decision against a party, which has been duly summoned but which failed to appear at oral proceedings may not be based on facts or evidence, put forward for the first time during those oral proceedings, see G 4/92, point 1 and first part of point 2 of the headnotes; T 484/90, headnote and T 439/91, chapter 6 of the reasons for the decision.

As far as it concerns new arguments presented for the first time during the oral proceedings the Board notes
that from the cited decision only G 4/92 mentions such a situation stating in the second part of point 2 of its headnotes that new arguments may in principle be used to support the reasons for the decision.

Hence, the Board concludes that there has been no breach of the Opponent's right to be heard and that the oral proceedings therefore do not have to be repeated.

The Board notes that no request for oral proceedings to be held before the Board of Appeal has been submitted.

Concerning the Appellant's request to give "to the Opponent a new opportunity for arguing on the remarks and arguments given by the Patentee at the oral proceedings" the Board also notes that the appealing Opponent has had the opportunity during the appeal proceedings to present to the Board counterarguments to the arguments and remarks presented by the Patentee during the oral proceedings before the Opposition Division.

3. Admittance of documents D13 and D15 into the proceedings

Without giving any reasons, neither in the notice of appeal itself nor in the grounds of appeal, the Appellant requested under III.2 of the notice of appeal the cancellation of the Opposition Division's decision "as it denies the introduction into the proceedings of the documents 13 and 15, presented by the Opponent".

In paragraphs 4 and 6 of page 9 of the grounds for its decision the Opposition Division stated that documents
D13 and D15 were not introduced into the proceedings. The reasons given are that both were late filed and that the first does not show a publication date, while the second is not relevant as it does not show a mold.

The Board accepts the reasons given by the Opposition Division and sees no reason, especially in the absence of any reasoning to this point from the Appellant's side, to follow the Appellant's request under III.2 of the notice of appeal.

4. Inventive step, Article 56 EPC

4.1 A mold according to the preamble of claim 1 is indisputably known from document D1, said document representing thereby the closest prior art.

4.2 The objective technical problem solved by the patent in suit is the provision of a mold for the production of reinforced or prestressed concrete panels having an inverted channel concrete section with strictly rectangular external form, which makes it possible to produce such panels faster and with greater efficiency and economy.

4.3 The above mentioned problem is solved according to claim 1 in that the mold is of the type "mold in one piece", and that two stiff linear elements of triangular shaped section with a right angle are provided inside the mold in a way such that the right angle edge of each element lies on the edge of the corner between the plane lateral side and the underside of the rib forming part of the mold.
4.4 The above mentioned solution is not rendered obvious by the documents presented by the Appellant for the following reasons:

4.5 Document D6 describes a "mold in one piece" for manufacturing certain precast concrete structural elements. In this connection, Figure 12.8 shows a mold for manufacturing double-tee slabs. D6 does not relate to the production of reinforced or prestressed concrete panels having an inverted channel concrete section with a strictly rectangular external form. Moreover, it is primarily concerned with the dimensions of the mold and the use and positioning of high-strength steel reinforcing strands in such a mold.

4.6 Document D9 describes a mold for the production of cast concrete slabs, see Figure 1 and the description pertaining thereto. The slabs have a simple cuboid shape and are thus clearly very different from the reinforced or prestressed concrete panels having an inverted channel concrete section with a strictly rectangular external form produced with the mold according to document D1. Moreover, the mold described in D9 is clearly not a "mold in one piece" because the side walls thereof are to be retracted for extraction of the cast concrete slab, see column 3, lines 30 to 35. Figure 1 of D9 shows a triangular element in the corner between the bottom and the side wall of the mold and mentions in the sentence bridging columns 2 and 3 that a "Fase" is formed along the edge of the concrete slab. However, D9 contains no information as to the reason why such a triangular element or such a "Fase" should be provided. D9 does not suggest that this feature might be used in order to facilitate the extraction of
the cast slab from the mold. On the contrary, D9 emphasises that the essential technical concept for facilitating the extraction of the cast concrete slab from the mold resides in the retraction of the side wall of the mold in order to form a gap between the mold and the slab, see column 1, line 54 to column 2, line 7 of D9.

4.7 The Board cannot follow the Appellant's statement in paragraph 11 at page 6 of the grounds for appeal, arguing that the combination of the features "mold in one piece" (shown in D6) and "triangular linear stiff elements" (allegedly known from D9) is known. None of the cited documents discloses these two features in combination.

4.8 The Appellant argued with respect to inventive step that all features of claim 1 can be mosaiced by combining three prior art documents, namely D1, D6 and D9. It was further argued that the recitation of the features (i) "mold in one piece", (ii) linear stiff triangular elements in the corner of the mold and (iii) shape of the mold to produce panels having an inverted channel concrete section with a strictly rectangular external form are "a mere aggregation or juxtaposition" of features with "no functional reciprocity" between these features.

Even if all features of claim 1 could be derived by combining the three documents D1, D6 and D9 it is established jurisprudence of the Boards of Appeal of the EPO that it is not sufficient to show that a combination of all features recited in a claim can be obtained by formalistically "combining" the disclosures
of various prior art documents. This is all the more true in the present case where the Appellant relies on a combination of three documents. What is actually required is a consideration of whether the skilled person starting from the closest prior art and trying to solve the objective technical problem underlying the invention would — not just could, but would — have used the information in the prior art in order to arrive at the claimed invention, (cf. Case Law of the Boards of Appeal of the European Patent Office, fourth edition, 2001, Section I.D.6.1, third paragraph). In the Board's view this is not the case here, since there are no promptings in documents D1, D6 or D9 which encourage the skilled person to do so.

Further the Board can only see the Appellant's statement that the three differentiating features of claim 1 are merely an aggregation or juxtaposition with no functional reciprocity or synergy, as an unsubstantiated allegation, since no evidence or document of prior art was presented in order to support this statement. Not only that, but the Board is convinced that paragraphs [0019] and [0020] of the patent specification clearly show that the shape of the mold, the number of pieces of which it consists and the stiff linear elements are functionally interrelated and ensure together the achievement of the afore-mentioned advantageous technical effects, i.e., that the objective technical problem as defined above can be solved. In this connection the Board also observes that this functional interrelationship is nowhere discussed in the prior art cited by the Appellant.
Moreover, the Appellant argues that the objective technical problem underlying the claimed invention is to be defined as stated in paragraph [0016] of the patent specification.

The Appellant's definition of the objective technical problem, however, even though it is taken from the patent specification, is inadequate because it contains a pointer to the claimed solution, namely the feature "mold in one piece". Such a definition of the technical problem, however, is inadmissible (cf. Case Law of the Boards of Appeal of the European Patent Office, fourth edition, 2001, Section I.D.4.2).

Neither a "mold in one piece" nor triangular elements in the mold corners are shown in D11. In fact, this document does not relate to the production of concrete panels having an inverted channel concrete section with a strictly rectangular external form.

The Appellant contends that the provision within the mold of linear stiff elements of a triangular shaped section with a right angle for obtaining bevelled edges is obvious from document D11. The Board cannot accept this argument since, firstly the sentence quoted by the Appellant on page 18 of D11 mentions only "stripping fillets or features" and discloses no specific reference to elements of triangular section or to any specific mold, and secondly, because the stripping fillets and features in the molds shown in figures 10.2 and 10.5 of D11 are clearly not "linear stiff elements of a triangular section" and the molds depicted in the aforementioned figures are not "molds in one piece", but "molds in pieces"; this can be seen in Figure 10.5.
where arrows have been included to represent the action of removing the lateral pieces of the mold, as well as in Figure 10.2, where spacers, ties and features must be removed for obtaining the finished units (although in this case the demolding action is not represented graphically).

4.11 Therefore, none of the documents D6, D9 or D11 provides a teaching which would have motivated the skilled person to modify the mold for the production of concrete panels having an inverted channel concrete section with a strictly rectangular external form as known from D1 so as to arrive at the mold according to claim 1 of the patent in suit.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Nachtigall

C. Holtz