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File Number: T 020/90 - 3.2.3
Application No.: 84 901 937.7
Publication No.: 0 176 507
Title of invention: Modular Construction Units

Classification: E04B1/348, E04C1/04, 1/24

D E C I S I O N
of 27 June 1991

Applicant: VITALE, Assunta Elizabeth

Headword:

EPC Articles 97, 111(1), 113(1); Rule 68(2) EPC

Keyword: "Decision based on new grounds"
"Decision not sufficiently reasoned"
"Remittance to Examining Division"

Headnote



Case Number : T 020/90 - 3.2.3

D E C I S I O N
of the Technical Board of Appeal 3.2.3
of 27 June 1991

Appellant : VITALE, Assunta Elizabeth
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Decision under appeal : Decision of Examining Division of the European
Patent Office dated 08.06.89 refusing European
patent application No. 84 901 937.7 pursuant to
Article 97(1) EPC.

Composition of the Board :

Chairman : C.T. Wilson
Members : K.W. Stamm
J.H. van Moer

Summary of Facts and Submissions

I. European patent application Nr. 84 901 937.7, filed on 22 May 1984 and published under international publication No. WO 84/04770 with eight claims was refused by decision of the Examining Division dated 8 June 1989. The decision was based on amended Claims 1 to 11 received on 9 March 1988 together with amended pages 1, 1a of the description.

II. Claim 1 reads:

"A rigid modular construction unit (10) including a pair of frameworks in which each framework comprises outer construction elements (12, 14, 16, 18) defining a generally planar structure having a plurality of corners between adjacent construction elements, each outer construction element (12, 14, 16, 18) of a framework having a corresponding element (12, 14, 16, 18) in the other framework, said frameworks being in face to face relation, spacer means (20) connecting said frameworks in spaced relation to each other so that the construction unit defines a volume, and said outer construction elements (12, 14, 16, 18) each having an outer web having a thickness which is small compared to its width and extending such that adjacent modular construction units (10) in a structure are capable of being joined together by joining means passed through adjacent webs of the adjacent modular construction units (10), the spacers (20) being of such a length that the overall width of the construction unit (10) is in the range from about 75 to about 500 mm, characterized in that said outer construction elements (12, 14, 16, 18) of each framework include a construction member having a web which is folded to form at least two

adjacent construction elements and one or more of said corners between said adjacent construction elements."

- III. a) In its decision the Examining Division held that the only difference between Claim 1 and the disclosure of document

A: GB-A-991 427

was the construction of each framework with one or more corners as folded webs and that the subject-matter of Claim 1 lacked an inventive step. In the Statement of Grounds it is reasoned that "Although the prior art does not explicitly disclose the use of folded webs, this particular method of forming corners is well known in this art..".

- b) The Examining Division was of the opinion that the feature "outer web" in Claim 1 was not clear since in some of the sections disclosed in Figure 4 no web was present, and that
- c) the embodiments of Figures 3, 5, 6, 7, 10 and 12 did not fall within the scope of Claim 1, since they did not incorporate at least one corner formed by folding. As a result, the Examining Division found that Claim 1 was not supported by the description and lacked clarity.

- IV. On 4 August 1989 the Applicant filed an appeal against the decision per telecopy, confirmed by letter received on 11 August 1989, and paid the appeal fee on 7 August 1989. The Statement of Grounds was filed on 11 October 1989, together with a new set of 21 claims.

New Claim 1 reads:

"A modular structure defined by a plurality of adjacent individual modular construction units, characterized in that each unit (10) includes first and second open frameworks (12, 14, 16, 18) in which the first framework comprises outer construction elements defining a generally planar structure having a plurality of corners between adjacent construction elements, each outer construction element (12, 14) of the first framework having a substantially similar element in the second framework, said framework (12, 14, 16, 18) being arranged in face to face orientation, spacers (20) connecting said frameworks (12, 14, 16, 18) in spaced relation to each other so that the assembled construction unit (10) defines an internal volume, the overall width of the construction unit being from about 75 to about 500 mm, said outer construction elements (12, 14, 16, 18) each having an outer web having a thickness which is less than the width of said web, each outer web presenting a substantially planar outer surface positionable adjacent a similar outer web surface on an adjacent construction unit (10) for joining thereto by means passed through adjacent webs of the adjacent modular construction units, said outer construction elements (12, 14, 16, 18) of each framework including a construction member folded to form at least two adjacent construction elements and at least one of said corners between said adjacent construction elements.

- V. The Appellant requests cancellation of the contested decision in full and grant of a patent based on the new claims.

Reasons for the Decision

1. The Appeal is admissible.
2. The Examining Division have consistently stated in their two communications of 30 October 1987 and 26 April 1988 as well as in the contested decision that the subject-matter of claim 1 differs from the disclosure of GB-A-991 427 in that each framework is constructed with one or more corners as folded webs, and that this measure would be obvious to the man skilled in the art. However, for the first time in the contested decision they explained that the reason this measure would be obvious is that "this particular method of forming corners is well known in this art", although they also admit that the (available?) state of the art does not explicitly disclose a construction having folds. Thus, prior to the contested decision no reason had been given for holding the use of this method of forming corners obvious for the man skilled in the art, and in the contested decision itself the "reasoning" is based on an unsubstantiated contention.

Therefore, even if the Board were completely convinced, (which it is not), that the decision complies with Rule 68(2) EPC (decisions shall be reasoned), it is quite clear that the decision does not comply with Article 113(1) since the Appellant has not been given an opportunity to comment on the contention that the method of forming corners by using folded webs was well known in the art.

The Examining Division has therefore clearly omitted to apply Article 113(1) EPC leading to a substantial procedural violation.

3. For this reason alone the Board would have to exercise its power under Article 111(1) EPC to remit this case to the Examining Division for further prosecution.

4. However, in the particular circumstances of the case, the Board feels obliged to make the following observations:

- (i) As has been pointed out in earlier decisions of the Boards, inventive step cannot be denied solely on the grounds that the characterising features of the main claim are known in the same specialist field (see for example T 39/82, OJ EPO 11/82, page 419, and T 223/86 of 12 April 1988, not published).

In decision T 39/82 it was pointed out that

"7.3 From the foregoing considerations of what suggestions for the teaching of the characterising portion of claim 1 were to be gleaned from the prior art, especially from German patent specification 915 657, it is evident that, contrary to the view taken in the contested decision, inventive step cannot be denied solely on the grounds that the measure forming this teaching was known before the priority date through a publication in the same special field as the subject-matter of the application. To arrive at a proper assessment of inventive step, it was also necessary to examine whether the prior art gave the skilled person an indication for applying this measure in the present case. Such an indication does not have to be given *expressis verbis*. It can reside in the fact that the purpose of the known measure in the known case is the same as in the case to be decided. It therefore had to be investigated what problems are solved in the known case and in the case in suit. Since this investigation revealed that the problems differ

fundamentally from one another, that result had to be taken as proof that from the publication describing the measure it was as little obvious to the skilled person as from the remaining state of the art to use this measure in the different context provided for in the application. It was therefore without significance that, as in the opinion of the contested decision, no special difficulties had to be overcome in the use of this measure."

It follows, therefore, that such "well-known" methods must be clearly identified in their context to allow a clear comparison at least of respective problems solved. It is also pointed out in this respect that this essential feature "a construction member having a web which is folded" was not included in the claims on which the Search Reports were made.

(ii) The required objectivity in assessing inventive step is achieved by following the well established problem-solution approach

- (cf. T 24/81, "Metal refining", OJ EPO 1983, 133;
- T 1/80, "Carbonless copying paper", OJ EPO 1981, 206;
- T 20/81, "Shell-Aryloxybenzaldehyd", OJ EPO 1982, 217;
- T 39/82, "Light-reflecting slats", OJ EPO 1982, 419;
- T 26/81, "Containers", OJ EPO 1982, 211;
- T 32/81, "Cleaning apparatus for conveyor belt", OJ EPO 1982, 225;
- T 21/81, "Electromagnetically operated switch", OJ EPO 1983, 15,18).

Such an approach in the present case would have avoided the above criticisms, and should now be adopted by the Examining Division.

5. When applying the problem-solution approach, the following considerations should be taken into account.

5.1 Usual standard sections hardly appear capable of being "folded" partially, as claimed. On the contrary, webs of normal standard sections would risk to be damaged by applying such "folds" which consist of a bend having a radius of curvature being approximately zero: "fold" means a sharp edge.

5.2 Folding webs according to Claim 1 results in using "continuous strips" in frameworks instead of the usual assemblage of cut pieces. Two technical implications arise then, on the basis of the presently available prior art:

a) The partial continuity maintains partially the static strength, in particular the flexural resistance - which is not the case with the normally completely severed pieces which are to be joined separately.

b) The word "fold" is not at all usual in modular construction blocks and rather appears technically associated with so-called "folded structures". These are known as roof construction for industrial buildings and consist of flat plane elements, e.g. of concrete, which form together a prismatic three-dimensional-structure. It is to be observed that the term "folded" in relation to these structures does not apply to a process of deformation (as presumably is the case in the claim) - but to a geometrically defined linear edge.

5.3 The usual way known in the presently available art of rigid modular construction units started with discrete linear members, generally of angular cross-section, and then joined them to the final spatial system. It was not usual, however, to avoid assembling of separated straight

single pieces and replacing joining of them in part by folding. Folding would also appear, as mentioned above, damaging and not convenient for the normally used gauge sections. These folds, therefore, present constituents of an unusual static system in the field of such modular units which define also appropriate dimensional and static conditions.

6. In the circumstances of the case, the Board has accordingly decided to exercise its power under Article 111(1) EPC to remit this case to the Examining Division for further prosecution.

7. Since the Board has found the substantial procedural violation to be the ground for allowing the appeal, it considers that it is equitable to order reimbursement of the appeal fee in accordance with Rule 67 EPC, notwithstanding that the appellants have not requested reimbursement.

Order

For these reasons, it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Examining Division for further prosecution.

3. The appeal fee is to be reimbursed.

The Registrar



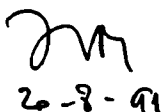
N. Maslin

The Chairman



C.T. Wilson

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