PATENTAMTS

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DECISION of 16 June 1999

Case Number: T 0652/97 - 3.2.3

Application Number: 90904909.0

Publication Number: 0466726

IPC: E02D 29/02

Language of the proceedings: EN

### Title of invention:

Improvements relating to building and shoring blocks

#### Patentee:

Hesco Bastion Limited

#### Opponent:

Officine Maccaferri S.p.A.

## Headword:

### Relevant legal provisions:

EPC Art. 52(1), 56 EPC R. 67, 68(2)

## Keyword:

"Inventive step - confirmed"

"Disapproval of the appellant's arguments regarding the closest prior art not reasoned in the decision on appeal in conflict with Rule 68(2) EPC - substantial procedural violation in the sense of Rule 67 EPC occurred"

## Decisions cited:

# Catchword:

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Boards of Appeal

Chambres de recours

Case Number: T 0652/97 - 3.2.3

DECISION
of the Technical Board of Appeal 3.2.3
of 16 June 1999

Appellant: Officine Maccaferri S.p.A.

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Representative: Provvisionato, Paolo

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Respondent: Hesco Bastion Limited

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Representative: Denmark, James

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 14 April 1997 rejecting the opposition filed against European patent No. 0 466 726 pursuant to Article 102(2)

EPC.

Composition of the Board:

Chairman: C. T. Wilson
Members: J. B. F. Kollar

M. K. S. Aúz Castro

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### Summary of Facts and Submissions

I. European patent No. 0 466 726 was granted with eighteen claims on 8 November 1995 on the basis of European patent application No. 90 904 909.0.

Claim 1 of this patent reads as follows:

A cage structure (120) which is for use at a site where the structure (120) will be filled with sand, soil and other building material, wherein the cage structure (120) is made up of pivotally interconnected open mesh work panels (90-96, 128, 130, 132) which are connected together under factory conditions so that the cage (120) can take a flattened form for transportation to site where it can be erected to take a form in which panels (90-96, 128, 130, 132) thereof define side and end walls and an open top through which the cage structure can be filled and under said factory conditions said panels (90-96, 128, 130, 132) defining the cage side and end walls are pivotally interconnected edge to edge and are relatively foldable to lie face to face in the flattened form for transportation to site, and can be relatively unfolded to bring the cage (120) to the erected condition without the requirement for any further interconnection of the side and end walls (90-96, 128, 130, 132) on site, characterised in that the side walls each comprise a plurality of side panels (128, 130) pivotally connected edge to edge and folded concertina fashion one relative to another, and the side walls are connected by partition panels (132) which are pivotally connected thereto, the cage structure being adapted to be erected on site by pulling it apart by the end walls

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and when it is moved from the flattened form to the erected condition the side panels (128, 130) unfold and define with the end walls and partition panels (132) an elongated wall structure having a row of cavities (126) to be filled with said building material and of which each partition panel (132) is common to the pair of cavities (126) adjacent the partition panel (132)."

II. The patent was opposed by the appellant on the grounds of insufficient disclosure of the invention "according to claim 2" (Article 100(b) EPC), and on the grounds of lack of inventive step Article 100(a) EPC, referring to the prior art which can be derived from documents

D1: GB-A-845 863

D2: EP-A-0 202 552

D3: WO-A-90/12160

D4: Patent Abstracts of Japan, volume 6, No. 249 & JP-A-57146835

D5: DE-A-1 609 814

D6: EP-A-0 124 157

D7: CA-B-968 726

D8: US-A-4 011 728

D9: US-A-4 572 705.

The objection pursuant to Article 100(a) EPC was based

primarily on document D2 as the closest prior art, in contrast to document D1 referred to in the patent specification, and the subject-matter of claim 1 as granted had to be considered as lacking an inventive step in view of the combination of

D2 and D4, or

D2 and D5, or even

D2 and D6.

III. The Opposition Division came to the conclusion that the subject-matter of claim 2 was sufficiently clearly defined that the skilled person would be able to carry out the invention.

Furthermore, the Opposition Division, stating in point 5 of its decision dispatched on 14 April 1997 that

"D2 is, however, no more relevant than D1 from which the contested patent starts",

came to the conclusion that the subject-matter of the patent in suit was not obvious in the light of the available prior art and rejected the opposition.

IV. An appeal against this decision was lodged on 11 June 1997, the appeal fee being paid on the same day, and the Grounds of Appeal being filed on 12 August 1997.

In his submission received on 21 April 1998 the appellant has introduced into the appeal proceedings a

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further document

D10: CH-A-59 925 and

with his letter filed on 25 May 1999 two further documents

D11: GB-A-28 168 and

D12: "Serrazanetti Broschure" entitled "Gabbioni speciali di vete metallica" in Italian and with a translation in English.

V. During the oral proceedings held before the Board on 16 June 1999 the parties formulated their requests as follows:

the appellant requested as main request that the decision under appeal be set aside and the case be remitted to the first instance for further prosecution, by way of auxiliary request that the patent be revoked; additionally he requested reimbursement of the appeal fee,

the respondent requested that the appeal be dismissed.

VI. In support of the above requests, the appellant argued essentially as follows:

## 1. Main request

In the decision under appeal, inventiveness of the claims and particularly of claim 1 has been confirmed by starting from document D1 instead of

D2 on which a major part of the appellant's arguments during the opposition procedure was based. The only comment on document D2 in the contested decision is to be found in Section 5 thereof, stating that D2 is no more relevant than D1. Due to the absence of an adequate reasoning as far as the aforementioned substitution of D1 for D2 is concerned, the contested decision does not comply with the provision of Rule 68(2) EPC and constitutes a substantial procedural violation.

### 2. Auxiliary request

- 2.1 With reference to the issue of late-filed documents D10 (dated 1911), D11 (accepted 1909) and D12 (published 1910), the difficulties of finding and getting copies of said old documents which are not recorded on patent data bases should be taken into account. These documents should be admitted because of their relevance.
- 2.2 The invention as defined in claim 1 of the patent in suit differs from the disclosure of document D2 only in that the side walls of the cage structure are made of a plurality of side panels pivotally connected edge to edge and foldable in concertina fashion. This feature appears to be completely anticipated by the teaching of document D4.

The idea of providing a cage structure which is quickly foldable and unfoldable is already disclosed in D2. The only problem a skilled person is therefore confronted with is that of finding a different way of folding a box- or cage-like

element in a way as to allow a longer element to be easily transported.

Figures 5 to 8 of document D4 give the immediate idea that a lengthy extensible container is there provided with a plurality of cavities having side panels folded in a concertina fashion.

In view of the fact that the objective technical problem inherent in D2 is solved with the features of the structure as disclosed in D4, that D2 and D4 are strictly related to the specific field common to the invention claimed in the contested patent, and that all the features of claim 1 thereof are known from the one or the other of said documents and that they mostly overlap each other, there are no reasons left on which the inventiveness of the main claim of the contested patent could be based.

2.3 Document D10 discloses a gabion structure comprising a base wall, four side walls and a lid, Figures 6 and 8 of this document showing that the side walls of the gabion can be folded in a concertina fashion; D10 thus confirms, that it was customary to fold edge structures flat so as to make them easily transportable and quickly erectable on site.

Documents D11 and D12 disclose multicellular elongated cage structures, preferably constructed on site, which comprise all features set forth in claim 1 of the contested patent. Moreover, document D11 (see Figure 3) and brochure D12 (see

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pages 10 and 11) disclose rows of hexagonally shaped gabions, said documents thus forming at the date of filing the contested patent a part of common general knowledge in this specific field.

Taking into account the teaching of D10 and the broad knowledge of cage structures made of hinged panels, as shown for example in D1 and D2, and of elongated cage structures, as shown in D11 and D12, it is stressed that claim 1 of the patent in suit does not involve an inventive step and therefore does not meet the requirements of Articles 52(1) and 56 EPC.

- VII. The counterarguments presented by the respondent (patentee) can be summarised as follows:
  - 1. The Opposition Division made reference (in paragraph 5 of the contested decision) to document D2 indicating that D2 discloses a collapsible cage structure which is erected by pulling apart the end walls. It expressed the view, however, that D2 was no more relevant than D1 from which the patent in suit proceeds and in this respect the Opposition Division was correct.
  - 2. In D1 and D2 the forms of the cages are slightly different. In D2 the cages have the side and end walls permanently hingedly connected, whereas in D1 the cage includes a base to which the side and end walls are permanently connected. In each case the cages are erected on site, and then, contrary to what is alleged by the appellant, further operation is needed to lock the cages in erected

condition. In D2 such locking means comprise the bars 16 and 17, whereas in D1 the edges of the sides and ends are connected by fixing means. However, in each case, the resulting structure is a cage which is then filled with a suitable material.

The first instance was right in considering D2 to be not more relevant than D1 and the appellant's main request should be rejected and the refund of the appeal fee should be refused.

2.1 The invention defined in claim 1 of the patent in suit differs from D2 in that the side walls of the cage structure are made of a plurality of side panels pivotally connected edge to edge and foldable in a concertina fashion. This is a major and inventive difference over D2. It is wrong to say that this feature appears completely anticipated by the teaching of document D4.

D4 is not a concertina type structure but rather is a lattice work made up of individual boxes connected by ropes and arranged to form intersecting channels to be filled with concrete to provide a reinforced area.

The inventiveness of the invention compared to D2 and D4 is thus apparent and the part of appellant's arguments for rejection of the patent based on the combination of D2 and D4 should be refused.

2.2 Regarding documents D10, D11 and D12 it is

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submitted that these documents should not be introduced into the proceedings because

- (i) they are filed too late in the proceedings and
- (ii) they are no more relevant than the prior art already in the case.

Document D10 relates to a single gabion or box and there is no suggestion that the boxes could be hinged together to define a wall structure according to the present invention.

Documents D11 and D12 concern woven structures the elements of which are connected without the use of double walls by intertwining the meshes during manufacture. There is no suggestion in these documents of a pivotal interconnection and/or of folding said elements in the manner claimed in claim 1 of the patent in suit.

# Reasons for the Decision

- 1. The appeal is admissible.
- 2. Main request
- 2.1 As can be seen from the facts set out above, the decision to reject the opposition was issued without giving reasons as to why inventiveness of the claims and particularly of claim 1 had been confirmed by starting from document D1 rather than from document D2

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on which a major part of the appellant's arguments during the opposition procedure had been based.

- 2.2 The appellant is right in asserting that the only comment on D2, namely in Section 5 of the Opposition Division's decision stating that "D2 is no more relevant than D1", does not provide an adequate reasoning for the substitution of D1 for D2 and that the decision on appeal thus conflicts with the principle enshrined in Rule 68(2), which states that "decisions of the European Patent Office which are open to appeal shall be reasoned...".
- 2.3 The principle enshrined in Rule 68(2) EPC is of fundamental importance for ensuring a fair procedure between the European Patent Office and parties conducting proceedings before it and implicitly rules that the European Patent Office can only properly issue a decision against a party if the grounds upon which such a decision is based have been adequately reasoned.
- 2.4 In the present case, throughout the opposition proceedings the appellant founded his line of reasoning for lack of an inventive step of claim 1 entirely on D2 in combination with D4 or D5 or even D6. By simply disregarding D2 in favour of D1, the Opposition Division failed to provide grounds which would have allowed a subsequent understanding of why the appellant's view was not to be shared and the opposition thus to be rejected.
- 2.5 The requirement of Rule 68(2) EPC can only be said to be met when the chain of reasoning in the decision is complete, which means that no relevant evidence present

in the proceedings and possibly having an influence on the result of the reasoning, has been omitted. In the Board's view, this requirement was not met here. The appellant had absolutely no reason to expect the Opposition Division's decision to be reasoned on anything other than his major argument or at least to explain only this argument is not convincing. Issuing the decision under appeal against the appellant without providing him with any reasoning upon his main argument under conflicts with 68(2) EPC and constitutes a substantial procedural violation.

## 3. Auxiliary request

- 3.1 The Board does, however, not find it necessary to refer the case back to the first instance, but has decided to apply Article 111(1) EPC and, exercising the powers of the Opposition Division responsible for the decision under appeal, to continue with the opposition proceedings itself.
- 3.2 Admissibility of the late-filed documents

Documents D10, D11 and D12 which the appellant submitted for the first time during the appeal proceedings have been examined by the Board according to Article 114(1) EPC and the examination has revealed the following:

Document D10 relating to collapsible gabion discloses features of the preamble of the granted claim 1 only, while the subject-matter of said claim differs from D10 by the features of its characterising portion. In D10 there is suggested a simple gabion or box and there is

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not the least suggestion that the boxes could be hinged together to make an assembly which can be folded concertina fashion and unfolded to define a wall structure as is the case in the present invention.

Documents D11 and D12 disclose substantially the same subject-matter relating to metal revetments for protecting banks, slopes and the like. These documents are silent about the precharacterising features of claim 1 of the patent in suit which state that "the case is made up of **pivotally** interconnected open mesh work panels" and that "the panels defining the cage side and end walls are pivotally interconnected edge to edge and are relatively foldable to lie face to face in the flattened form for transportation to site". Nor do the documents D11 or D12 disclose the characterising feature of claim 1 of the patent specifying "panels pivotally connected edge to edge and folded concertina fashion one relative another". According to D11 (see page 1, lines 18 to 22 and claim 1) and D12 the revetment's elements are connected without the use of double walls by intertwining the meshes during manufacture.

In the light of the above findings the Board has established that late-filed documents D10, D11 and D12 are not more relevant than the documents filed in time and do not disclose matter which could change the outcome of the decision. Therefore, it was decided to disregard them pursuant to Article 114(2) EPC.

# 3.3 Novelty

The Board is satisfied that the subject-matter of

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claim 1 is novel over each document mentioned during the proceedings. Since this has never been disputed by the appellant there is no need for further detailed substantiation of this matter.

## 3.4 Inventive step

3.4.1 It is established jurisprudence of the Boards of Appeal that the objective assessment of inventive step has to be preceded by the determination of the technical problem which the invention addresses and solves and that the technical problem is to be formulated in the light of the closest state of the art.

Therefore, in order to apply this approach for objectively assessing inventive step, it is essential to establish the closest prior art. Generally, this requires that the claimed invention should be compared with the art concerned with a similar use which requires the minimum of structural and functional modifications.

3.4.2 The subject-matter of claim 1 of the patent in suit relates to a cage structure specified in the preamble of claim 1.

In the opposition and appeal procedure contradictory assertions were made by the parties in that the appellant considered document D2 to form the closest prior art while the respondent referred to document D1 as the starting point for the invention.

The Board finds that the precharacterising feature of claim 1 stating that the panels "can be relatively

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unfolded to bring the cage to the erected condition without the requirement for any further interconnection of the side and end walls on site" is missing in both D1 and D2 and that document D1 moreover does not cover the precharacterising feature of claim 1 stating that "panels are connected together under factory conditions".

Therefore, in the Board's judgement, following the principle mentioned in point 3.4.1 above, document D2 represents a closer state of the art than D1 does.

3.4.3 In the light of this closest prior art, the technical problem underlying the present invention may be seen in seeking to provide a cage structure simply erectable on site to provide a structural block in a rapid and efficient manner.

According to the invention, this technical problem is solved by the following characterising features of claim 1:

- (a) the side walls each comprise a plurality of side panels
  - (a1) pivotally connected edge to edge and
  - (a2) folded concertina fashion one relative to another, and
- (b) the side walls are connected by partition panels which are pivotally connected thereto,
- (c) the cage structure being adapted to be erected on

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site by pulling it apart by the end walls and

- (c1) when it is moved from the flattened form to the erected condition the side panels unfold and
- (c2) define with the ends walls and partition panels an elongated wall structure having
- (c3) a row of cavities to be filled with said building material and of which each partition panel is common to the pair of cavities adjacent the partition panel.

In view of results specified in column 3, lines 20 to 57 and described by way of example with reference to the drawings of the patent specification, the Board is satisfied that the above-defined problem is solved.

- 3.4.4 On the question of whether or not the state of the art would lead the person starting from the teaching of D2 to a cage structure according to claim 1 the following is observed:
- 3.4.5 The argumentation of the appellant that document D2 in combination with document D4 or D5 or D6 anticipates the inventive step of the subject-matter of claim 1 of the patent in suit does not convince the Board.

In D2 the cage structure has the side and end walls permanently hingedly connected. The structure is erected on site and then further means are needed to lock the cages in erected condition - such locking means comprise the bars 16 and 17 which are necessary to rigidify the structure.

The present invention differs from D2 by the combination of characterising features (a) to (c3) according to point 3.4.3 above and resides in the particular idea that the side walls are pivotally connected edge to edge as well as to the partition walls, so that the structure can fold concertina fashion and unfold to form an elongated wall.

The idea in D4 is to form a surface over a slope to be reinforced by a lattice work made up of individual boxes connected by ropes and arranged to form intersecting channels to be filled with concrete to provide a reinforced area. The appellant referring to Figures 5 to 8 talks about substituting the ropes of D4 with a couple of side panels hinged to each other or that the ropes could be shortened so as to bring the upper and lower walls of adjacent square forms close to each other, whereby the panels could be foldable in concertina fashion. The appellant is exercising his ingenuity beyond reason at this point, because as explained above D4 is providing a specific form of structure to cover an area and to modify D4 in the way suggested would have been to completely destroy the basic idea of D4.

Document D5 is remote from the contested patent in that according to this document rigid angle links between

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reinforcing bars are capable of being folded to a predetermined degree to vary a distance between the reinforcing bars to suit concrete structure, but there is no folding and unfolding concertina fashion as in the present invention.

The technical field of document D6 relating to a concertina-like collapsible screen for heat insulation is also remote from that of the concerned patent. The skilled person would not consider a teaching in so remote a field to seek a solution to the problem set out above.

The fact that with hindsight "similarities" can be found between parts of documents D4, D5 and D6 and the opposed patent does not present evidence that it was obvious for the skilled person starting from document D2 to arrive at the present invention.

- 3.4.6 The other documents cited in the proceedings give likewise no hint of the subject-mater of claim 1. Their teaching could therefore neither per se nor in combination with the teaching of the documents disclosed in the foregoing paragraphs lead the skilled person to a cage structure according to this claim.
- 3.4.7 In view of the above, the Board concludes that the subject-matter of claim 1 as granted involves an inventive step within the meaning of Article 56 EPC.
- 3.4.8 For these reasons the auxiliary request cannot be allowed.
- 4. Reimbursement of the appeal fee

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4.1 The reimbursement of the appeal fee shall be ordered where the Board of Appeal deems an appeal to be allowable, if such reimbursement is equitable in view of a substantial procedural violation.

4.2 In the case under consideration the first requirement is not met because the Board deems the appellant's main and auxiliary requests to be not allowable. Therefore, the appeal must be dismissed and the request for reimbursement of the appeal fee thus has to be rejected.

## Order

#### For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

S. Hue C. T. Wilson