

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen
(D) [] No distribution

D E C I S I O N
of 25 September 2001

Case Number: T 1049/00 - 3.2.3

Application Number: 90913770.5

Publication Number: 0487642

IPC: E04H 15/40

Language of the proceedings: EN

Title of invention:

Quickly erectable, quickly collapsible, self supporting portable structure

Patentee:

SPRING FORM, INC.

Opponent:

WORLDS APART LIMITED

Headword:

-

Relevant legal provisions:

EPC Art. 100(c)

Keyword:

"Inadmissible extension (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 1049/00 - 3.2.3

D E C I S I O N
of the Technical Board of Appeal 3.2.3
of 25 September 2000

Appellant: SPRING FORM, INC.
(Proprietor of the patent) 5237 Alta Canyonada
La Canada
CA 910111 (CA)

Representative: Gee, Steven William
1 South Lynn Gardens
London Road
Shipston on Stour
Warwickshire CV36 4ER (GB)

Decision under appeal: Interlocutory decision of the Opposition Division
of the European Patent Office posted 14 August
2000 concerning maintenance of the European
patent No. 0 487 642 in amended form.

Composition of the Board:

Chairman: C. T. Wilson
Members: J. du Pouget de Nadaillac
J. P. B. Seitz

Summary of Facts and Submissions

- I. The proprietor of the European patent EP-B1-0 487 642 - appellant in the following - lodged the present appeal on 24 October 2000 against the interlocutory decision dated 14 August 2000 of an opposition division of the European Patent Office, which only maintained the above mentioned patent in an amended form according to the third auxiliary request submitted by the appellant during the opposition proceedings, rejecting all his other and preceding requests for reasons of infringement against Article 100(c) EPC. The appeal fee was paid.

The statement of grounds of appeal was received on 22 December 2000. In said statement, the appellant contested the conclusions of the opposition division as to his main request, namely the patent as granted, and to his first and second auxiliary requests filed on 27 June 2000.

The opponent also appealed against the above decision, but, having advised the board of appeal that the parties were trying to reach agreement, withdrew his opposition and appeal on the day of, and shortly before the oral proceedings, which took place on 25 September 2001 before the board.

- II. The wording of Claim 1 according to each request reads as follows:

Main request: Claim 1 as granted:

"1. A portable structure operable for transforming from a fully collapsible configuration into an

upstanding fully expanded configuration and thence back into the fully collapsible configuration, the structure in the fully expanded configuration having a base intended for resting on a horizontal surface and a top, the structure comprising:

at least three side members (102A,B,C), each side member having a continuous frame (106) formed from a flexible coilable material, the frame forming a single loop when expanded and three overlaying loops when collapsed, and a panel (108) formed from a foldable material, the panel having means (110) for confining the frame whereby when the frame is expanded the panel is pulled taut by the frame;

each of the side members having a respective first part (120) and second part (122), with means (130) to attach said parts of adjacent side members together so that when attached the side members can hinge relative to one another: and means (104,132) to hold the side members so that the portable structure can remain in the upstanding fully expanded configuration;

characterised in that the first part (120A) of one side member is attached to the second part (122B) of another side member whilst the second part (122A) of the one side member is attached to the first part (122C) of yet another side member such that the side members form when the structure is in its fully expanded configuration a ring of side members with each of the side members hinged by its first part and its second part respectively to two adjacent side members, and with the structure in the upstanding configuration

having an apex (A) at its top."

First auxiliary request:

"A portable structure operable for transforming from a fully collapsible configuration into an upstanding fully expanded configuration and thence back into the fully collapsible configuration, the structure in the fully expanded configuration having a base intended for resting on a horizontal surface and a top, the structure comprising:

at least three side members (102A,B,C), each side member having an independent continuous frame (106) formed from a flexible coilable material, the frame forming a single loop when expanded and three overlaying loops when collapsed, and a panel (108) formed from a foldable material, the panel having means (110) for confining the frame whereby when the frame is expanded the panel is pulled taut by the frame;

each of the side members having a respective first part (120) and second part (122), with means (130) to attach said parts of adjacent side members together so that when attached the side members can hinge relative to one another; and means (104,132) to hold the side members so that the portable structure can remain in the upstanding fully expanded configuration;

characterised in that the first part (120A) of one side member is attached to the second part (122B) of another side member whilst the second part (122A) of the one side member is attached to the first part (120C) of yet another side member such that the side members form when the structure is in its fully expanded configuration a ring of side members with each of the

side members hinged by its first part and its second part respectively to two adjacent side members, and with the structure in the upstanding configuration having an apex (A) at its top."

Second auxiliary request:

"A portable structure operable for transforming from a fully collapsible configuration into an upstanding fully expanded configuration and thence back into the fully collapsible configuration, the structure in the fully expanded configuration having a base intended for resting on a horizontal surface and a top, the structure comprising:

at least three side members (102A,B,C), each side member having a continuous frame (106) formed from a flexible coilable material, the frame forming a single loop when expanded and three overlaying loops when collapsed, and a panel (108) formed from a foldable material, the panel having means (110) for confining the frame whereby when the frame is expanded the panel is pulled taut by the frame;

each of the side members having a respective first part (120) and second part (122), said first part (120) being a top left part and said second part (122) being a top right part in the fully expanded configuration, with means (130) to attach said parts of adjacent side members together so that when attached the side members can hinge relative to one another; and means (104,132) to hold the side members so that the portable structure can remain in the upstanding fully expanded configuration;

characterised in that the first or top left part (120A) of one side member is attached to the second or top right part (122B) of another side member whilst the second or top right part (122A) of the one side member is attached to the first or top left part (120C) of yet another side member such that the side members form when the structure is in its fully expanded configuration a ring of side members with each of the side members hinged by its first part and its second part respectively to two adjacent side members, and with the structure in the upstanding configuration having an apex (A) at its top."

III. The appellant argued as follows:

It was argued that the above Claims 1 and similarly worded apparatus Claims 5 of the above requests infringe Article 100(c) EPC in so far as two features, namely an **independent** frame for each side member and **top left** and **top right** parts of the confining means, portions of which comprise the hinging means, are **both** not specified in these claims, although the specification of the patent in suit as filed discloses these features as being part of the present invention.

That each side member of the claimed structure must have an **independent** continuous frame is in fact implicit in the structure according to Claim 1 as granted, since otherwise the side panels could not be fully collapsed into three overlaying loops. To reach this result, each frame of each side member must be independent of its confining means, in other words it must be able to slide in its pocket. There is therefore no objection to introduce this feature in the claims, although it does not seem to be absolutely necessary.

On the other hand, it is not essential for the present invention that the hinges should only be located at the top right and top left parts of the confining means of the frame. Important in this respect is to see what is the technical concept which underlies the present invention und is implicitly disclosed to the skilled person by the description, as originally filed, of the patent in suit for the following reasons:

Saddle shaped structures, either rigid or comprising a foldable material, were well known. When a foldable material is involved, as is the case with the present invention, uniform tensioning is critical and the prior art literature shows that, for this purpose, rods, ropes or cables were used. However, with the present invention, it is quite different to use, for the same purpose, a flexible coilable frame, since the shape of the panel in its expanded configuration is the result of the reaction between the self expandable flexible frame and the foldable material fabric under tension, said foldable material being used as frame compression means. Moreover, the claimed structure is made of an assembly of several side members, which are not only self-expandable, each for itself, but also, due to the presence of the hinging means, provide spring forces which push the side members apart from each other, until they splay out apart, so that a taut structure is obtained in the fully expanded configuration. However, the structure does not reach a approximative flat shape, since additional means, namely the claimed holding means which also work under tension, are provided to stop their extensions. Thus, both, the pressure forces for erecting the structure and the holding means for stopping this process step at a certain stage, are essential for the concept of the

structure according to the present invention are

The shape of the side members or frames may be independent from this technical concept. In the description of the patent in suit, different examples of this concept are given and, in particular, regarding the passage concerning the embodiment of Figure 18, the presence of "top left" and "top right" parts of the side members are not mentioned. Regarding this figure, the hinge means could be located according to the description on the lower part of the long upper side edge of a side member, and, in such a case, it is even questionable whether this part, which is closer to the bottom part than to the top part, should be referred as a "top part". In the embodiment according to Figure 1, the top or apex is substantially flat and, according to the description, page 18, lines 30 to 34, as originally filed, it can be left open, without material, so that, here also, the meaning of the expressions "top left" and "top right parts" is questionable. Only with the embodiment of Figure 27, the shape of the side members together with their number is said to be essential to make the structure self-supporting, when no floor means are provided. It follows that the precise location of the hinges is a mere matter of choice and, thus, is not important. Therefore, the mention of the top left and top right parts in the claims as granted is an unnecessary limitation.

IV. The appellant requested that the decision under appeal be set aside and that the patent be maintained:

- as granted, or
- on the basis of either the first or second

auxiliary request filed with letter dated 27 June 2000.

Reasons for the decision

1. The appeal is admissible.

2. In the description as originally filed of the patent in suit, there is no explicit mention of any technical concept, which may underlie the present invention. The introductory part of this description, after having mentioned the background art and the objects of the invention, discloses in page 3 the "principals" of the invention, which are repeated in Claim 1 as originally filed. It is in particular indicated that, under the provision of these "principals", the confining means of each side member have a **top left part** and a **top right part** and that hinging means are provided for hinging a portion **of the top right part** of the confining means of one side member to a portion **of the top left part** of the confining means of one other side member. The detailed part of the description is further introduced by the statement that these principals are shown in the figures and, regarding these figures, the person skilled in the art can see in all of them without exception side members, which may indeed have symmetrical or unsymmetrical shapes, but nevertheless each comprise at least four sides in the form of a four-corner diamond or four-point panel, said panel resting on one rounded corner, called the bottom part in the description, from which in the figures a bottom right and a bottom left part diverge upwardly. Each side member or side panel has more or less a saddle-

like curvature and its upper corner, referred as the top part, either forms the apex of the structure or is located adjacent to it. Therefore, in all embodiments of the present invention, a right and left top part of each side member, namely the parts immediately adjacent to and located on both sides of the top part, can be recognised. It is true that, in the passage of the description concerning the second embodiment of the invention according to Figure 18, the top left and top right parts are not explicitly mentioned, but it is indicated that the "side members are hinged in a similar manner as in the (first) embodiment" according to the preceding Figures 1 to 17, in which the top right and top left parts are clearly shown, being respectively referenced 120 and 122.

3. The generally diamond-shaped form of the side members is not explicitly mentioned in the original documents of the patent in suit. However, it is illustrated in all figures and there is no at least explicit disclosure of any other possible shapes, which could have left in doubt the meaning of the expressions "top left" and "top right" parts. These expressions interpreted in the light of the original documents of the patent in suit were therefore clear, so that there was no legal reason to modify them.

4. The appellant has argued that the precise location of the hinges was not indicated in the description. However, the description as well as Claim 1 clearly indicate that means are hinging **a portion of the top left part** of one side member **to a portion of the top right part** of another and adjacent side member. Thus, according to the description as originally filed, the hinging means are at least to be located on these

determined parts of the side members. It may be that, in the case of the asymmetrical embodiment according to Figure 18, hinging means located on the lower portion of the **long** "right" or "left" top part of a side member are closer to the ground than they are to the apex, so that the use of these expressions may appear to be strange. Nevertheless this does not prevent the hinge means from being located on said top parts in the meaning of the description as filed.

5. Also an **implicit** basis for the general technical concept, which according to the arguments of the appellant in the oral proceedings underlies the present invention, cannot be found in the original documents of the patent. As already said, nowhere in the description is there a reference to the idea of such a general technical concept and this idea seems even to be in contradiction with the so called "principals" of the invention disclosed in the original description and mentioned in the above point 2. In particular, there is no suggestion anywhere in the description that the location of the hinging means is irrelevant for the present invention or that shapes for the side members other than those illustrated in the figures, and more particularly shapes without right and left top parts, could be used in the context of the present invention.

In contrast thereto, page 6, lines 24 to 26, of the description as filed, which deals with the general features of the present invention, discloses that "each of the side members include a compression means for shaping the expanded frame of each side member into a **predetermine**(d) configuration". Such a passage seems - contrary to the appellant's arguments - to indicate that the shape of the side members is of importance.

The person skilled in the art, reading further this passage in combination with the passage about the "principals" of the invention, comes to the conclusion that the right top part and left top part are essential features of the present invention. The appellant's argument concerning the embodiment of Figures 27 and 28, namely that only the passage (page 17, lines 14 to 25 of the original description) concerning these two figures indicates that the shape according to this embodiment is of importance, which a *contrario* would imply that this is not the case for the other embodiments, is to be rejected, since the same passage begins with the indication that this embodiment is "produced by the principals of the invention". These "principals" as far as the location of the hinging means is concerned are confirmed by the following passage (page 17, lines 26 to 35) which concerns particular examples of hinging means according to Figure 29, which in this passage are used "for quick connecting **the top parts** of adjacent side members". It clearly shows, that at the priority date of the patent in suit, this particular location of the hinging means was considered to be essential.

6. Thus, according to the documents of the patent in suit as originally filed, the loop of the side member, as mentioned in Claim 1, must be such as to comprise top right and top left parts. This implies a certain shape of this loop.

7. It is further noted that no mention of a "first part" or "second part" of a side member appears in the description as originally filed, so that the skilled person reading Claim 1 as granted or Claim 1 according to the first auxiliary request and trying to interpret

these claims in the light of the description would be confused by these new terms and questioned the protection sought by them, which seems to be open to a broader interpretation than that of the expressions "right or left top parts", since they do not refer to the top of the side members. Claim 1 as granted and Claim 1 of the first auxiliary request only mention a base, a top in the form of an apex and first and second parts for the shape of the side members. According to the description the apex could be a panel. Thus, shapes may be included in the scope of these claims, although they were not disclosed or suggested in the description of the patent in suit, as originally filed. The teaching of Claim 1 as granted and of Claim 1 according to the first auxiliary request are therefore ambiguous and allow scope for an interpretation which extends beyond the initial disclosure of the patent in suit.

8. For all these reasons, the set of claims according to the main request and first auxiliary request are not admissible (Article 100(c) EPC).

9. In Claims 1 and 5 of the second auxiliary request, there is no mention of side members, which each have an **independent** continuous frame. This term "independent" was also included in the "principals" of the invention and the appellant in the oral proceedings has confirmed that each side member **must** have an independent frame, in the sense that each frame can slide in its confining first means (pocket) which by means of the second means are attached to the foldable material forming the side panel. An independent frame is necessary to avoid any stressing of the foldable material during the collapsing operation. It is therefore a feature, which is essential for the present invention and,

consequently, should be found in the independent claims. The appellant's argument, that this feature was implicit and therefore unnecessary, cannot be followed. The mere deletion of this feature, when - as mentioned above - it was originally explicitly disclosed, could give the impression that this feature is no longer considered as essential and, thus, broaden the scope of the invention.

It follows that the set of claims according to the second auxiliary request is also not admissible (Article 123(2) EPC)

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

A. Counillon

C. T. Wilson