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**Datasheet for the decision
of 21 April 2008**

Case Number: T 1532/06 - 3.2.05

Application Number: 96202839.5

Publication Number: 0778122

IPC: B29C 53/04

Language of the proceedings: EN

Title of invention:

Method for shaping honeycomb core

Patentee:

Spirit AeroSystems, Inc.

Opponent:

Airbus SAS

Headword:

-

Relevant legal provisions:

EPC Art. 54, 56, 83

Relevant legal provisions (EPC 1973):

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Keyword:

"Novelty, yes"

"Inventive step, yes"

"Sufficiency of disclosure, yes"

Decisions cited:

-

Catchword:

-



Case Number: T 1532/06 - 3.2.05

D E C I S I O N
of the Technical Board of Appeal 3.2.05
of 21 April 2008

Appellant I: Spirit AeroSystems, Inc.
(Patent Proprietor) P.O. Box 780008 K11-60
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Representative: Land, Addick Adrianus Gosling
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
27 July 2006 concerning maintenance of the
European patent No. 0778122 in amended form.

Composition of the Board:

Chairman: W. Zellhuber
Members: P. Michel
E. Lachacinski

Summary of Facts and Submissions

I. Appellant I (patentee) lodged an appeal against the interlocutory decision of the Opposition Division maintaining European patent No. 0 778 122 in amended form.

The opposition of former appellant II (opponent), Airbus SAS, was withdrawn with a letter dated 6 December 2007.

II In the decision under appeal, it was held that whilst claim 1 according to the main request of the patentee, for maintenance of the patent in suit as granted, was not novel, the grounds of opposition under Article 100(a) EPC (lack of novelty, Article 54 EPC, and lack of inventive step, Article 56 EPC) and Article 100(b) EPC did not prejudice the maintenance of the patent as amended.

Appellant I requested that the decision under appeal be set aside and that the European Patent No. 0 778 122 be maintained as granted. A request for oral proceedings was withdrawn with a letter dated 15 April 2008.

IV. Claim 1 as granted reads as follows:

"1. A shaping apparatus (22) for shaping a preheated settable material (24), the apparatus comprising:

- a die (32);
- first and second tensioning assemblies (70, 72);
- at least one flexible support (38, 86, 96) having one end connected to said first tensioning assembly and

a substantially opposite end connected to said second tensioning assembly;

- whereby the settable material (24) is supported by the flexible support (38, 86, 96) and disposed between the flexible support and the die (32) during shaping,

characterised in that

- each tensioning assembly includes at least one roller (76, 88, 92) and at least one torque supply system for rotating the at least one roller;

- the at least one flexible support (38, 86, 96) has one end rotatably connected to the roller of the first tensioning assembly and a substantially opposite end rotatably connected to the roller of the second tensioning assembly;

- the shaping apparatus further comprises a regulation system that is operably engaged with the torque supply systems of both the first and second tensioning assemblies (70, 72), the regulation system for equalizing tension between the end of the flexible support and for keeping the opposed torque supply systems operating in unison;

wherein each torque supply system includes at least one air motor (84, 87, 108) in communication with its respective roller (76, 88, 92) and capable of sustaining a constant torque on the roller and wherein the regulation system includes a constant air pressure source attached to all air motors."

The following documents are referred to in the present decision:

D1: EP-A-0 709 178

D2: US-A-4,885,317

D3: FR-A-2 413 968

VI. The arguments of appellant I in the written proceedings can be summarised as follows:

Document D1 does not explicitly or implicitly disclose a constant air pressure source attached to all of the air motors. The subject-matter of claim 1 as granted is therefore new.

VII. The arguments of former appellant II were that the patent in suit as granted did not meet the requirements of Article 83 EPC, Article 54 EPC having regard to the disclosure of document D1, and Article 56 EPC having regard to the disclosure of documents D2 and D3.

Reasons for the Decision

Main Request

1. *Sufficiency of Disclosure*

Claim 1 specifies that the settable material to be shaped is supported by the flexible support and is disposed between the flexible support and the die. It is thus implicit that, in the case of a single die, the die is situated above the flexible support.

It is clear that, if a single die were to have concave portions, the settable material would not be pressed into the concave portions by the flexible material alone, so that such a form requires both an upper and a

lower die, as disclosed in the patent in suit. The person skilled in the art would appreciate whether, in the case of a particular shaped article, a single male die having only convex contours was sufficient, or whether upper and lower dies are required. Both these alternatives are disclosed in the patent in suit (see Figures 7 to 10 and the corresponding description at column 9, lines 16 to 40).

The Board sees no reason to believe that the person skilled in the art would not be capable of providing a regulation system for the tensioning assemblies capable of equalising tension between the ends of the flexible support and for keeping the opposed torque supply systems operating in unison. Whilst the form of die shown in Figure 8 of the patent in suit would result in a net force acting on the settable material in the direction of one of the tensioning assemblies, there is no reason to believe that the person skilled in the art would be incapable of preventing consequent movement of the material out of the desired location.

The person skilled in the art would immediately realise that the use of rollers which are not parallel would prevent an even tension from being applied to the flexible support and, approaching the description with the intention of providing a useful shaping apparatus, would not consider such an arrangement.

The Board is therefore satisfied that the apparatus of claim 1 is disclosed in the patent in suit in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art without undue burden, so that the requirement of Article 83 EPC is satisfied.

2. *Novelty*

The subject-matter of claim 1 is disclosed in application document US 545 190, from which the patent in suit claims priority. Particular reference is made to the claims, the last paragraph on page 11 and the first paragraph on page 13 of the priority document. The subject-matter of claim 1 is thus entitled to the claimed priority date.

Document D1 is a European patent application having a priority date prior to the priority date of the patent in suit and a publication date between the priority date and the filing date of the patent in suit. Moreover D1 refers to the same contracting states as the patent in suit. Therefore, D1 forms part of the state of the art pursuant to Article 54(3) and (4) EPC 1973 for all the states designated in the patent in suit.

There is, however, no disclosure in document D1 of a regulation system for keeping the opposed torque supply systems operating in unison which includes a constant air pressure source attached to all air motors. The air motors of the shaping apparatus of document D1 could equally well be supplied with air under a pressure which is individually controllable for each motor, so that the motors produce differing torques.

The subject-matter of claim 1 is accordingly new within the meaning of Article 54 EPC.

3. *Inventive step*

3.1 Closest prior art

Document D2 constitutes the closest prior art. The shaping apparatus disclosed in this document comprises a flexible support (36) which passes over rollers (42) and is kept under tension by means of springs (38).

The subject-matter of claim 1 of the patent in suit is thus distinguished over the disclosure of this document by the tensioning assembly as defined in claim 1 which comprises at least one air motor in communication with its respective roller and is capable of sustaining a constant torque on the roller and a regulation system which includes a constant air pressure source attached to all air motors.

3.2 Problem

The problem to be solved may accordingly be regarded as being to improve the regulation of the tension in the flexible support.

3.3 Solution

There is nothing in the cited prior art which would point the person skilled in the art towards the solution of this problem as specified in claim 1.

Document D3, cf. Figures 1 to 3, is concerned with an apparatus in which an article is transported into and out of a press by means of a cloth (22) which is maintained under tension between drums (14, 16) rotated

by servomotors (24, 26). There is, however, no suggestion that the arrangement disclosed in this document could solve the problem as set out above. Rather, the problem to be solved is concerned with the transport of the workpiece (see page 1, lines 29 to 33).

The subject-matter of claim 1 according to the main request thus involves an inventive step within the meaning of Article 56 EPC.

4. Claims 2 to 10 are directly or indirectly dependent from claim 1 and relate to preferred features of the shaping apparatus. The subject-matter of these claims therefore similarly involves an inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent as granted.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber