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**Datasheet for the decision
of 30 October 2007**

Case Number: T 0893/05 - 3.2.05

Application Number: 96105770.0

Publication Number: 0728970

IPC: F16K 27/00

Language of the proceedings: EN

Title of invention:
Fluid pressure device

Patentee:
SMC Kabushiki Kaisha

Opponent:
FESTO AG & CO

Headword:
-

Relevant legal provisions:
EPC Art. 123(2), 54, 56

Keyword:
"Added subject-matter (no)"
"Novelty (yes)"
"Inventive step (yes)"

Decisions cited:
-

Catchword:
-



Case Number: T 0893/05 - 3.2.05

DECISION
of the Technical Board of Appeal 3.2.05
of 30 October 2007

Appellant: FESTO AG & CO
(Opponent) Ruiter Strasse 82
D-73734 Esslingen (DE)

Representative: Vetter, Hans
Patentanwälte
Magenbauer, Reimold, Vetter & Abel
Plochinger Strasse 109
D-73730 Esslingen (DE)

Respondent: SMC Kabushiki Kaisha
(Patent Proprietor) 16-4, Shimbashi 1-chome
Minato-ku
Tokyo 105-8659 (JP)

Representative: KEIL & SCHAAFHAUSEN
Patentanwälte
Cronstettenstrasse 66
D-60322 Frankfurt am Main (DE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
10 May 2005 concerning maintenance of European
patent No. 0728970 in amended form.

Composition of the Board:

Chairman: W. Zellhuber
Members: P. Michel
M. J. Vogel

Summary of Facts and Submissions

- I. The appellant (opponent) lodged an appeal against the interlocutory decision of the Opposition Division maintaining European patent No. 0 728 970 in amended form.

In the decision under appeal, it was held that the grounds of opposition submitted by the appellant did not prejudice the maintenance of the patent as amended.

- II. The appellant requested that the decision under appeal be set aside and that the European Patent No. 0 728 970 be revoked in its entirety.

The respondent (patentee) requested dismissal of the appeal or, as an auxiliary request, maintenance of the patent in suit on the basis of claims 1 to 3 as filed on 9 January 2006.

- III. Claim 1 as maintained in the decision under appeal reads as follows:

"1. A fluid pressure device comprising at least one fluid unit (50; 80) formed by connecting together a plurality of blocks (52, 54, 56, 58, 60; 82, 84, 86, 88, 90) having different functions, the fluid unit (50; 80) being connected to an external device (74), said fluid pressure device further comprising:

plug-in/one-touch electric signal connecting means (51, 53; 91, 98) for collectively mounting a plurality of terminals in a wall surface of said at least one fluid

unit (50, 80), to electrically connect said plurality of blocks (52, 54, 56, 58, 60; 82, 84, 86, 88, 90) to the external device (74), and for connecting said terminals to the external device (74) by a single multi-connector means (53; 98); and

a plug-in/one-touch fluid passage connecting means (73, 75; 92, 96) for collectively providing connecting portions (73; 92) within the wall surface of said at least one fluid unit (50; 80), to interconnect an external member (106) and fluid passages defined in said at least one fluid unit (50; 80) and for connecting said fluid passages to the external member (106) by a plurality of cylindrical insertion members which are inserted into said connecting portions (73; 92),

characterized by complex female-type connecting means (94) comprising said plurality of terminals (51, 91) and said fluid passage connecting means (73, 92) provided in a single block (60; 90) within adjacent regions on a same wall surface of said at least one fluid unit (50, 80); and

complex male-type connecting means (100) comprising a multi-connector means (53, 98) electrically connected to said electric signal connecting means (51, 91) and a connecting unit (75, 96) connected to said fluid passage connecting means (73, 92)."

IV. The following documents are referred to in the present decision:

D1: JP-A-4-77189

D2: English translation of document D1

D3: Excerpt from Festo catalogue "Montierte Magnetventile Lieferprogramm", Ausgabe 1/90

V. The appellant's arguments can be summarised as follows:

The feature of claim 1 according to which the complex female-type connecting means and the fluid passage connecting means are provided in a single block is not disclosed in the application as filed. This block is referred throughout the description as filed as a sensor block. The subject-matter of claim 1 thus extends beyond the disclosure of the application as filed.

The subject-matter of claim 1 is not new having regard to the disclosure of either documents D1 and D2 or document D3. As shown in Figure 3 of documents D1 and D2, elements 14 and 70 constitute a single block formed from two elements. As shown at pages 5.2 and 5.3 of document D3, a single block is formed from rigidly connected elements in which electrical terminals and fluid passage connecting means are arranged in a single plane.

Insofar as it cannot be accepted that the fluid pressure device of document D3 comprises a single block as specified in claim 1 of the patent in suit, the subject-matter of claim 1 nevertheless lacks an inventive step. The closest prior art is document D3.

Apart from a reversal of male and female connecting means, the subject-matter of claim 1 is distinguished over the disclosure of this document solely in that the connecting means are not provided on a unitary block, but on two adjacent blocks. The replacement of two adjacent, rigidly connected elements by a single element does not, however, involve an inventive step.

VI. The respondent's arguments can be summarised as follows:

Figures 2 and 3 of the application as filed show a single block (block 60 in Figure 2 and block 90 in Figure 3), comprising a plurality of terminals (51, 91) and the fluid passage connecting means (73, 92) within adjacent regions on a common wall surface of the fluid unit (50, 80). The subject-matter of claim 1 is thus disclosed in the application as filed.

None of the documents on file discloses the provision of electrical and fluid passage connecting means in a single block. In documents D1 and D2, the fluid passage connections are provided on manifold portion (14) and the electrical connections on bus connector (70). The same applies to document D3, as shown on page 5.3. The subject-matter of claim 1 is thus new.

Document D3 represents the closest prior art. As shown at page 5.3, the pneumatic and electrical connections are provided on separate elements, connected by thin rods. It is thus necessary to perform several operations in order to establish electrical and pneumatic connections.

The problem to be solved is to simplify the assembly of the device.

The solution to this problem as defined in claim 1 is not suggested by the prior art. Indeed, it would not be possible to combine the fluid and electrical connections in a single block, since valves are present between the pneumatic manifold and the electric circuit board. Similar arguments apply to the teaching of documents D1 and D2.

The prior art thus does not contain any incentive to change the structure of the devices known from either documents D1 and D2 or document D3 so that both the electrical and fluid passage connecting means are provided in a single block.

The subject-matter of claim 1 thus involves an inventive step.

Reasons for the Decision

1. *Main Request*

1.1 Amendments

The term "single block (60; 90)" as used in claim 1 is disclosed in Figures 2 and 3 of the application as filed. Figure 2 shows a fluid unit (50) having a single block (60), in which are provided complex female-type connecting means comprising said plurality of terminals (51) and fluid passage connecting means (73) within adjacent regions on a common wall surface. Figure 3

shows a fluid unit (80) having a single block (90), in which are provided complex female-type connecting means comprising a plurality of terminals (91) and fluid passage connecting means (92) within adjacent regions on a common wall surface.

Whilst it is correct that the block (60, 90) of the fluid pressure device is referred to in the description as originally filed (published version) as a "sensor block" (column 4, line 17 and column 5, line 34), this is not considered to detract from the disclosure of the drawings which show a single block in which both the electrical terminals and the fluid passage connecting means are provided on a common wall surface.

The amendments thus comply with the requirement of Article 123(2) EPC.

1.2 Novelty

As shown in Figure 3 of documents D1 and D2, electrical terminals (54) are provided on a block (50) and fluid passage connectors (24, 25, 26) are provided in a separate block (14).

As shown in the figures at pages 5.2 and 5.3 of document D3, electrical terminals are provided as a unit at one end of a circuit board and are supported by means of two horizontal bars on a block on which are provided (male) fluid passage connectors.

It is not considered that the term "single block" can be construed so as to include separate elements rigidly connected to one another. Referring to the device shown

in Figure 2 of the patent in suit, this comprises a plurality of blocks (52, 54, 56, 58 and 60) each having predetermined functions (see paragraph [0018]). Each of these blocks can, however, be referred to as a single block.

Thus, the prior art does not disclose a single block in which both the electrical terminals and the fluid passage connecting means are provided.

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

1.3 Inventive step

The closest prior art is represented by document D3. As indicated in section 1.2 above, the subject-matter of claim 1 is distinguished over the device disclosed in this document by the use of a single block for both the electrical and fluid connections.

Such an arrangement has the advantage that assembly of the device is facilitated.

The cited prior art does not suggest the solution to this problem as specified in claim 1. As also noted in section 1.2 above, the device of documents D1 and D2 similarly provides the electrical connections on a separate block from the fluid connections.

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

2. Claims 2 and 3 are directed to preferred features of the fluid pressure device of claim 1, so that the subject-matter of these claims similarly involves an inventive step.
3. Since the main request of the respondent is allowable, it is not necessary to consider the auxiliary request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber