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**D E C I S I O N**  
**of 7 January 2003**

**Case Number:** T 0105/01 - 3.2.1

**Application Number:** 95940760.2

**Publication Number:** 0795101

**IPC:** F16L 37/084

**Language of the proceedings:** EN

**Title of invention:**  
Positive latch quick connector

**Applicant:**  
ITT MANUFACTURING ENTERPRISES, INC.

**Opponent:**  
-

**Headword:**  
-

**Relevant legal provisions:**  
EPC Art. 123(2)

**Keyword:**  
"Addition of subject-matter (no, after amendment)"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 0105/01 - 3.2.1

**D E C I S I O N**  
**of the Technical Board of Appeal 3.2.1**  
**of 7 January 2003**

**Appellant:** ITT MANUFACTURING ENTERPRISES, INC.  
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**Representative:** Dreiss, Fuhlendorf, Steimle & Becker  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 19 September 2000  
refusing European patent application  
No. 95 940 760.2 pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** S. Crane  
**Members:** J. Osborne  
M. Aúz Castro

## Summary of Facts and Submissions

- I. European patent application No. 95 940 760.2 was refused by the decision of the Examining Division posted on 19 September 2000.

The reason given for the decision was that independent claims 1, 2, 11 and 12 contained subject-matter which extended beyond the content of the application as filed (Article 123(2) EPC).

- II. A notice of appeal against this decision was filed on 9 November 2000 and the fee for appeal paid at the same time. The statement of grounds of appeal was filed on 10 January 2001, accompanied by an amended set of claims.

- III. In response to communications of the Board posted on 6 February 2002 and 20 September 2002, in both of which the Board stated that it intended to remit the case for further processing in the event of claims being filed which were free of objection under Articles 84 and 123(2) EPC, the appellants submitted on 28 September 2002 a new set of amended claims 1 to 9.

Independent claims 1 and 2 (clerical errors in the underlined words have been corrected by the Board) read as follows:

1. A quick connector (10) formed of
  - a female component (14) having a stepped through bore (48, 50) extending axially from a first open end (42) of the female component (14) to a second end (44) of the female component (14),

- a male component (12) having a through bore (20) and a radially extending annular flange (22) spaced from an end (18) insertable through the first open end (42) of the female component (14) into the stepped through bore (48, 50) in the female component (14),
- two seal members (24, 26) engageable with the male component (12) and the stepped bore (48, 50) of the female component (14),
- a retainer (16) carried on the male component (12),
- means (92, 94, 96) formed on the retainer (16) for releasably interconnecting the male and female components (12, 14) together upon insertion of the male component (12) into the female component (14),

characterized in

- that the retainer (16) comprises a base (80) with an annular recess (84) in which the annular flange (22) rests when the retainer (16) is mounted on the male component (12), and
- that the releasably interconnection of the male and female components (12, 14) by said means (92, 94, 96) formed on the retainer (16) occurs at or just after the sealing engagement of the seal members (24, 26) with the male component (12) and the stepped through bore (48, 50) of the female component (14).

2. A quick connector (10) formed of

- a female component (14) having a stepped through bore (48, 50) extending axially from a first open end (42) of the female component (14) to a second end (44) of the female component (14),

- a male component (12) having a fitting (120) and a through bore (20) and an annular groove (122) spaced from an end (110, 144) insertable through the first open end (42) of the female component (14) into the stepped through bore (48, 50) in the female component (14),
- two seal members (24, 26) engageable with the male component (12) and the stepped bore (48, 50) of the female component (14),
- a retainer (124) carried on the male component (12), and
- means (132) formed on the retainer (16) for releasably interconnecting the male and female components (12, 14) together upon insertion of the male component (12) into the female component (14),

characterized in

- that the retainer (124) comprises a base (126) with a central aperture (128) through which the fitting (120) extends and is being held by a snap-ring (130) when the retainer (124) is mounted on the male component (12),
- that the releasably interconnection of the male and female components (12, 14) by said means (132) formed on the retainer (16) occurs at or just after the sealing engagement of the seal members (24, 26) with the male component (12) and the stepped through bore (48, 50) of the female component (14).

Dependent claims 3 to 9 relate to preferred embodiments of the quick connector according to claims 1 and/or 2.

IV. The appellants requested that the decision be set aside and that a patent be granted on the basis of the claims

referred to in section III above.

### **Reasons for the Decision**

1. The appeal complies with the formal requirements of Articles 106 to 108 and Rules 1(1) and 64 EPC. It is therefore admissible.
  
2. As indicated in the introductory description of the original application a problem can arise with quick connectors for fluid-carrying conduits in that there can be a sequence of peaks in insertion force until the male component is fully seated in and latched to the female component, which sequence can mislead the installer into halting the insertion operation before it is complete. One aim of the invention as originally presented was thus to provide a quick connector in which the resistance to insertion of the male component into the female component is exhibited at a single insertion force peak, see page 3, lines 20 to 24.

Present independent claims 1 and 2 relate respectively to the embodiments of Figures 1 and 2, 3 and 4, and 6 in the first case and the embodiment of Figure 5 in the second. The claims differ essentially only with respect to the manner in which the retainer is mounted on the male component. In both of the claims there is reference to two seal members engageable between the male component and the stepped bore of the female component and to the releasable interconnection of the male and female components occurring at or just after sealing engagement of the seal members.

It is thus apparent that the objection of the Examining

Division under Article 123(2) EPC, which as the Board understands it was directed to the independent claims then under consideration only requiring a single seal member, no longer obtains.

Furthermore, the objections of lack of clarity (Article 84 EPC) raised by the Board in the course of the proceedings against the various claims then under consideration no longer apply to the present set of claims.

3. Since the Examining Division still has to complete its consideration of the substantive merits of the claimed subject-matter, the Board makes use of its discretion under Article 111(1) EPC to remit the case for further prosecution.

## **Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

S. Fabiani

S. Crane