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Aktenzeichen / Case Number / N<sup>o</sup> du recours : T 159/86

Anmeldenummer / Filing No / N<sup>o</sup> de la demande : 80 901 550.6

Veröffentlichungs-Nr. / Publication No / N<sup>o</sup> de la publication : WO 81/00 607

Bezeichnung der Erfindung: Improved joining shackle or link

Title of invention:

Titre de l'invention :

Klassifikation / Classification / Classement : F16G 15/02; B63B 21/20

**ENTSCHEIDUNG / DECISION**

vom / of / du 27 October 1987

Anmelder / Applicant / Demandeur : Bruce, Peter

Patentinhaber / Proprietor of the patent /  
Titulaire du brevet :

Einsprechender / Opponent / Opposant :

Stichwort / Headword / Référence : Chain joining link/Bruce

EPO/EPC/CBE Article 123(2) EPC

Kennwort / Keyword / Mot clé : - General applicability of teaching evident to  
person skilled in the art

Leitsatz / Headnote / Sommaire

Europäisches  
Patentamt

Beschwerdekammern

European Patent  
Office

Boards of Appeal

Office européen  
des brevets

Chambres de recours



Case Number : T 159/86

**DECISION**  
of the Technical Board of Appeal 3.2.1  
of 27 October 1987

**Appellant :** Bruce, Peter  
Court View,  
12 Mount Havalock,  
Douglas, Isle of Man (GB)

**Representative :** Wotherspoon, Graham  
Fitzpatrick's,  
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**Decision under appeal :** Decision of Examining Division 117  
of the European Patent Office  
dated 9 January 1986 refusing  
European patent application  
No. 80 901 550.6 pursuant to  
Article 97(1) EPC

**Composition of the Board :**

**Chairman :** P. Delbecque  
**Members :** C. Wilson  
O. Bossung

## Summary of Facts and Submissions

I. European patent application No. 80 901 550.6 filed on 26 August 1980 as an international application No. PCT/GB80/00131 and published under the international publication No. WO 81/00607 was refused by a Decision of the Examining Division of the European Patent Office dated 9 January 1986. The decision was based on Claims 1-3 filed on 30 August 1985 and Claims 4-12 filed on 3 October 1984, Claim 9 of which reads as follows:

9. A chain joining link according to anyone of the preceding claims, characterised in that the axial length of the flanges (3) is greater than the axial length of the corresponding recesses (7) in which the flanges are received by an amount between 0.12% and 0.38% of the axial length of the recess (7).

The reason given for the refusal was that this claim was not allowable, since its subject-matter extends beyond the content of the application as originally filed, contrary to Article 123(2) EPC. In particular, whilst the percentage size difference of the flange and recess can be considered to be sufficiently clearly described for a 76mm shackle in the originally filed application, there is no clear indication therein to extend this overdimension to a general teaching relating to a percentage increase applicable to all sizes of chain shackles or links.

II. A notice of appeal was filed on 10 March 1986 and the appeal fee paid on 14 March 1986. In the Statement of grounds filed on 9 May 1986 the appellant argues that it was clear from the originally filed application that the percentage overdimension applied to all sizes of shackles.

The appellant therefore requests that the impugned decision be set aside and that a patent be granted based on Claims 1 to 3 filed on 30 August 1985 and Claims 4 to 12 filed on 3 October 1984. As an auxiliary request, he requests grant of a patent on the basis of Claims 1 to 12 filed with the Statement of grounds on 9 May 1986, in which Claim 9 is restricted to a 76mm shackle.

#### Reasons for the decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.
2. Article 123(2) EPC, which governs amendments before grant specifies that,  
  
"A European patent application.....may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed".
3. The present application relates in general to joining shackles or links for chain, in particular, joining shackles for stud-link marine anchor chain. The original disclosure, (page 6, lines 19-22) of the published PCT-application refers to a particular example for a 76mm shackle. The overall thickness of the mating flanges of the U-members are made greater than the corresponding recess width in the shells into which they are assembled by between 0.05mm and 0.16mm. With a recess width of 42.36mm disclosed in the originally filed informal drawing showing a 76mm shackle, the percentage oversize of the flanges with respect to the recess width lies between 0.1180% and 0.3777%, which is rounded off to an amount between 0.12% and 0.38% in Claim 9. The Board agrees with the Examining Division that there is no objection to this rounding off.

4. However, the Board does not agree that Claim 9, insofar as it is not restricted to the specific percentage oversize for 76mm shackles only, contains subject-matter which extends beyond the content of the application as filed.

From the general reference to marine anchor chain (cf. page 1, lines 1-3 original description), and the figures given on page 7 for the static compressive preload of the flanges and the chain breaking load for the referred-to 76mm shackle, it is clear that the particular shackle must form part of a marine chain, in particular of oil rig quality (O.R.Q) steel. The person skilled in the art, having thus identified the 76mm chain mentioned in the specification, would also know that the load capacity of such chains of different sizes varies to a close approximation with the square of the scale factor and that different size of chain and related links are strictly in geometric proportion to each other as required by the classification (see pages 1 and 2 of International Standard Shipbuilding - Anchor chains, ISO 1704-1973(E)).

The person skilled in the art would therefore expect a set design of shackle to be proportioned similarly for different shackle sizes.

5. It is therefore the Board's opinion that it would be clear to the person skilled in the art that the percentage increase in Claim 9 as calculated for a 76mm shackle would be applicable to other sizes of chain shackles or links.
6. Claim 9 does not therefore contain subject-matter which extends beyond the content of the application as filed.

7. From the foregoing it follows that the decision impugned cannot be upheld. Moreover, the first instance has stated in its decision that the patent application contains patentable subject-matter and that Claims 1-8 and 10-12 would be allowable. The application has thus been examined under Articles 54 and 56, and the Board agrees with the opinion of the first instance in this respect. It still seems appropriate however to pursue the examination under Article 84. In particular, the following comments should be considered:-

- i) It is not clear that the wedge surfaces (4) can be considered to be "co-operating with the half shells (6)" as stated in Claim 2. This phrase could apparently be replaced by "on the opposing flange pairs".
- ii) The mid-plane (T-T) referred to in Claim 5 is not clearly defined. Whereas this plane is referred to in the claim as the transverse mid-plane of the flange pair, it is referred to on page 6 of the description as the transverse mid-plane of the recess (7). This plane is not, however, indicated on the figures and, since as far as can be understood, the plane extends axially of the link, it is not clear in what sense it is a "transverse" plane. The wording of the claim is moreover not grammatically correct (see "the cross-sections ... is symmetrical ...").
- iii) Confusion is caused in Claims 7 and 8 by apparently referring to the link U-portions (2) (see Claim 1) as a U-link or simply link. The term link should be used in the claims only for the chain joining link to which the claims are directed.

8. The set of claims forming the basis for the auxiliary request need not be examined since it differs from the main set of claims only in respect of Claim 9 which has been found allowable by the Board.

**Order**

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

1. The decision of the Examining Division of the European Patent Office dated 9 January 1986 is set aside.
2. The case is remitted to the first instance for further examination.

The Registrar:



F. Klein

The Chairman:



P. Delbecque