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**Datasheet for the decision  
of 22 February 2007**

**Case Number:** T 1396/04 - 3.2.02

**Application Number:** 96911637.5

**Publication Number:** 0821569

**IPC:** A61B 17/00

**Language of the proceedings:** EN

**Title of invention:**

Fixation device and method for installing same

**Applicant:**

LINVATEC CORPORATION

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 54, 56

**Keyword:**

"Novelty and inventive step (yes, after amendments) - fourth auxiliary request"

**Decisions cited:**

-

**Catchword:**

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Case Number: T 1396/04 - 3.2.02

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.02  
of 22 February 2007

**Appellant:**

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**Representative:**

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**Decision under appeal:**

Decision of the Examining Division of the  
European Patent Office posted 30 June 2004  
refusing European application No. 96911637.5  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** T. Kriner  
**Members:** M. Noel  
E. Dufrasne

## Summary of Facts and Submissions

- I. European patent application No. 96 911 637.5 (international publication number WO 96/32890) was refused by the decision of the examining division dated 30 June 2004 on the ground that the claimed subject-matter did not satisfy the requirements of Article 123(2) EPC.
- II. The appellant (applicant) lodged an appeal on 9 September 2004 and paid the appeal fee on the same day. A statement setting out the grounds of appeal was filed on 8 November 2004 along with amended sets of claims.
- III. Oral proceedings were held on 22 February 2007, on the appellant's request, in the course of which amended sets of claims according to a main request and four auxiliary requests were filed.

At the end of the oral proceedings the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of one of the pending requests.

- IV. The following documents are mentioned in the present decision:

D2: WO-A1-96/14798

D3: US-A-5 372 604.

V. The claims 1 according to the various requests read as follows:

Main request (the identifying letters (a) to (e) having been introduced by the Board for ease of reference):

"Apparatus for inserting a fixation device securely into a bore in an element comprising:

- (a) a hand held device (2) having an actuating mechanism (4),
- (b) a longitudinally extending member (5, 6, 55, 57) coupled to the hand held device adapted to hold the fixation device at a distal end (8),
- (c) the fixation device (17, 17C) comprising one or two cylinder-shaped members (17A, 17B, 17'C) having a plurality of engaging fingers adapted to be moved outwardly when the fixation device is inserted into the bore to secure the fixation device in the bore,
- (d) the longitudinally extending member having a cylinder (5, 55) and an operating member comprising a shaft (6, 57) disposed concentrically in the cylinder,
- (e) the operating member being releasably coupled to the fixation device for exerting an axial force on the fixation device while simultaneously holding the cylinder in position, to cause the engaging fingers to extend outwardly to engage the wall of the bore."

First auxiliary request: the content of claim 1 of the main request with the following additional features, at the end of feature (d):

"and terminating in a coupling member (66) coupling the operating member to the fixation device, the coupling member having a frangible connection (70) whereby when a preset force in the coupling member is exceeded, the frangible connection breaks and releases the fixation device from the operating member"

and with the deletion of the following expression in feature (e): "being releasably coupled to the fixation device for".

Second auxiliary request: the content of claim 1 of the main request with the following additional expression in features (c) and (e) before the wording "engaging fingers" : "integrally formed".

Third auxiliary request: the content of claim 1 of the first auxiliary request with the same addition as in the second auxiliary request.

Fourth auxiliary request (the identifying letters (a) to (e) having been introduced by the Board for ease of reference):

"Apparatus for inserting a fixation device securely into a bore in an element comprising:

- (a) a hand held device (2) having an actuating mechanism (4),
- (b) a longitudinally extending member (5, 6, 55, 57) coupled to the hand held device adapted to hold the fixating device at a distal end (8),
- (c) the fixation device (17, 17C) comprising two cylinder-shaped members (17A, 17B, 17'C) each having a plurality of engaging fingers adapted to

be moved outwardly when the fixation device is inserted into the bore to secure the fixation device in the bore,

- (d) the longitudinally extending member having a cylinder (5, 55) and an operating member comprising a shaft (6, 57) disposed concentrically in the cylinder,
- (e) the operating member being releasably coupled to the fixation device for exerting an axial force on the fixation device while simultaneously holding the cylinder in position, to cause the engaging fingers to extend outwardly in two opposite longitudinal directions to engage the wall of the bore."

VI. The appellant submitted that, concerning claim 1 of the main request, the apparatus disclosed in D2, in particular in Figure 10, had a structure more complex than that of the apparatus of the present application and that the longitudinally extending member, called housing in D2, exerted a force onto the surface on the tissues surrounding the bore provided for inserting the fixation device, a disadvantage that the present invention just sought to avoid. In the embodiment according to Figure 11 of D3, the wire fingers of the fixation device were not part of a cylinder-shaped member but only embedded in a separated cylindrical sleeve.

The claims 1 according to the first to third auxiliary requests incorporated additional features referring to a coupling member having a frangible connection and to integrally formed engaging fingers, in order to better

distinguish the claimed subject-matter from the cited state of the art.

Claim 1 according to the fourth auxiliary request differed from the cited prior art documents by the presence of two cylinder-shaped members and the engaging fingers extending outwardly in two opposite longitudinal directions. Its subject-matter, therefore, was clearly novel and inventive over the cited state of the art.

## **Reasons for the Decision**

1. The appeal is admissible.
2. *Amendments*

The formal aspects concerning the amendments made to claim 1 according to the main request and the first to third auxiliary requests can be left open, since these requests are anyhow not allowable for substantive reasons as demonstrated hereinafter.

The amendments made to the claims of the fourth auxiliary request are validly supported by the application as filed, in accordance to the requirements of Article 123(2) EPC.

As to independent claim 1, features (a) and (b) are taken from claim 1 as originally filed; feature (c) is supported by original claims 1 and 26 and by the description, page 7, lines 24 to 29; page 8, lines 4 to 7 and page 10, lines 2 to 8; feature (d) is

supported by original claims 1 and 2; and feature (e) is a combination of features taken from original claims 1, 10 and 26, supplemented by features supported by the description on page 9, lines 2 to 9 and page 12, lines 20 to 24.

Dependent claims 2 to 22 are based on original claims 3 to 8, 11 to 24 and 26, respectively .

### 3. *Novelty*

3.1 D2 which is relevant under Article 54(3) EPC discloses (see in particular Figures 10 and 11) an apparatus for inserting a fixation device 20 securely into a bore 41 in an element (bone 42), comprising a hand held device 120 having an actuating mechanism 122, 124 and a longitudinally extending member 57, 12, 35 coupled to the hand held device adapted to hold the fixation device at a distal end.

Moreover, the fixation device comprises a cylinder-shaped member having a plurality of engaging fingers 33 adapted to be moved outwardly when the fixation device is inserted into the bore to secure the fixation device in the bore (see page 10, lines 19 to 22).

Moreover, the longitudinal extending member has a cylinder 57 and an operating member comprising a shaft 12 disposed concentrically in the cylinder.

Furthermore, the operating member 12 is releasably coupled to the fixation device 20 (see Figure 10) for exerting an axial force on the fixation device while simultaneously holding the cylinder 57 in position, to



cause the engaging fingers to extend outwardly to engage the wall of the bore.

As a result, D2 discloses all the features as presently formulated and contained in claim 1 according to the main request. Its subject-matter, therefore, is not novel within the meaning of Article 54 EPC.

The arguments set fourth by the appellant (see point VI above) are not convincing since the alleged differences with respect to the disclosure of D2 do not appear in claim 1 or any other claim of the present requests.

3.2 With respect to the first to third auxiliary requests, D2 discloses additionally (see Figures 9 and 10) an operating member or shaft 12, the distal end of which is used as a coupling member with the fixation device 20, said coupling member having a frangible connection 18, whereby when a preset force in the coupling member is exceeded, the frangible connection breaks and releases the fixation device from the operating member (see page 11, lines 3 to 7).

Furthermore D2 discloses a plurality of engaging fingers 33 formed integrally with the cylinder-shaped member 20 of the fixation device.

As a consequence, all features added to claim 1 according to the first, second and third auxiliary request, are also known from document D2. The subject-matter of these claims, therefore, also lacks novelty.

3.3 The subject-matter of claim 1 according to the fourth auxiliary request differs from the disclosure of D2 in that the fixation device 17 comprises two cylinder-shaped members 17A, 17B each having a plurality of engaging fingers and in that the engaging fingers are capable of extending outwardly in two opposite longitudinal directions.

Contrary to that, the fixation device used in D2 comprises only one cylinder-shaped member 20 having engaging fingers 33 which are able to extend in only one longitudinal direction. Therefore, the subject-matter of claim 1 according to the fourth auxiliary request is novel.

4. *Inventive step*

4.1 D3, which represents the most relevant pre-published state of the art discloses (see Figures 11 to 18 and from column 7, line 41 to column 8, line 44) an apparatus for inserting a fixation device 10 securely into a bore in an element, comprising a hand held device 30 (Figure 2) having an actuating mechanism and a longitudinally extending member 31, 33' coupled to the hand held device adapted to hold the fixation device at a distal end.

The fixation device 10 is received in a cylinder-shaped member 60, which is a part of the fixation device, having a plurality of engaging fingers 19, 25 adapted to be moved outwardly when the fixation device is inserted into the bore to secure the fixation device in the bore. There can be more than two diametrically opposed outwardly extending engaging fingers, as is

actually shown in Figure 11 (see paragraph bridging columns 8 and 9).

Moreover, D3 discloses that the longitudinally extending member has a cylinder 33' and an operating member comprising a shaft 31 disposed concentrically in the cylinder (the shaft being releasably coupled to the fixation device by means of a pair of resiliently spaced jaws 43, 45) for exerting an axial force on the fixation device while simultaneously holding the cylinder in position to cause the engaging fingers to extend outwardly to engage the wall of the bore (see column 8, lines 32 to 37).

- 4.2 Starting from D3, therefore, the object underlying the present application may be seen in providing a more secure attachment of the fixation device in the pre-drilled bore in an element.

This object is achieved in particular by the provision of a fixation device comprising two cylinder-shaped members, each having a plurality of engaging fingers adapted to be moved outwardly in two opposite longitudinal directions according to features (c) and (e) of claim 1 of the fourth auxiliary request. The extension of the plurality of fingers in two opposite longitudinal directions prevents the fixation device from moving further inwardly into the bore and prevents the fixation device from being pulled out of the bore.

Since such a fixation device is not to be found in any of the available prior art documents which are relevant under Article 54(2) EPC, the claimed solution was neither disclosed nor suggested by the cited state of the art. Therefore, the fixation device according to claim 1 of the fourth auxiliary request, involves an inventive step within the meaning of Article 56 EPC.

## **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 with the order to grant a patent on the basis of the fourth auxiliary request (claims 1 to 22) filed at the oral proceedings, with a description and figures to be adapted accordingly.

The Registrar:

The Chairman:

V. Commare

T. Kriner