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D E C I S I O N
of 22 December 2005

Case Number: T 1160/03 - 3.2.02

Application Number: 97935506.2

Publication Number: 0929261

IPC: A61B 17/12

Language of the proceedings: EN

Title of invention:
An embolization device for positioning in a blood vessel

Applicant:
WILLIAM COOK EUROPE ApS, et al

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 54(3), 123(2)

Keyword:
"Novelty (yes, after amendments)"

Decisions cited:
-

Catchword:
-

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Case Number: T 1160/03 - 3.2.02

D E C I S I O N
of the Technical Board of Appeal 3.2.02
of 22 December 2005

Appellant: WILLIAM COOK EUROPE ApS
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Representative: Indahl, Peter Jensen
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 2 June 2003 refusing European application No. 97935506.2 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: T. Kriner
Members: M. Noël
A. Pignatelli

Summary of Facts and Submissions

I. European patent application EP-A-97935506.2 (publication No. WO-A-98/09570) was refused by decision of the examining division dated 2 June 2003 on the ground that the claimed subject-matter was not novel under Article 54(1) and (3) vis-à-vis the prior art document D1: EP-A2-0 734 697.

II. The appellant (applicant) lodged an appeal against this decision by notice of appeal received on 6 August 2003 and filed a statement setting out the grounds of appeal, received on 10 October 2003, along with new sets of claims. The appeal fee was paid within the prescribed time-limit on 6 August 2003.

III. Oral proceedings were held on 22 December 2005, during which the appellant submitted an amended set of claims.

At the end of the oral proceedings the appellant requested that the decision under appeal be set aside and the case be remitted to the first instance for further prosecution on the basis of claim 1 as filed during oral proceedings and claims 2 to 13 of the first auxiliary request as filed with letter of 10 October 2003.

IV. The present claim 1 reads as follows, the identifying letters (a) to (d) having been introduced by the Board for the ease of reference:

"An embolization device for positioning in a blood vessel, comprising an elongated wire body (1) which in its unloaded condition has a predetermined shape and

has an elongated shape during its insertion through a catheter (18), a centre line of the wire body (1) being substantially straight during said insertion with the wire body in said elongated shape, which wire body (1) after its release from the catheter assumes a complexly curved shape which depends on the predetermined shape and on the blood vessel impact on the wire body,
c h a r a c t e r i z e d
(a) in that in its predetermined shape the wire body (1) between its front and back ends has at least one helix-free section (4) in which said centre line along a length of at least 20 mm follows a helix-free path,
(b) that the at least one helix-free section (4) in said complexly curved shape has a continuously varying curvature of the centre line,
(c) that the helix-free section (4) of the wire body extends to a front end section (2, 2''), which at the front end is curved, the centre line of the front end section here turning at least 90° in direction of the back end in relation to the course of the centre line in the helix-free section (4), when the wire body assumes its predetermined shape,
(d) and that the wire body in the helix-free section (4) has a spring constant which, when measured on a 50 mm long wire body portion is of at least $c = P/e \geq 0.0008$ N/mm, P being an axially acting applied force measured in N, and e being the change of length measured in mm."

V. At the oral proceedings the appellant submitted that while the features according to the preamble of claim 1 at issue were all known from document D1, none of those according to the characterising portion was neither directly nor implicitly disclosed by said document.

Reasons for the Decision

1. The appeal is admissible.

2. *Amendments*

The features according to the precharacterising portion of claim 1 are all based on the corresponding portion of claim 1 as originally filed and published in WO-A-98/09570.

The features according to the characterising portion are based on features drawn from the characterising portion of claim 1 as published and on features from dependent claims 2, 8 and 10 as published. In particular, feature (c) according to which the front end section is turned at least 90° in direction of the back end when the wire body assumes its predetermined shape is based on claim 2 as originally filed, on page 6, lines 16 to 23 of the description as filed and on Figure 3.

With respect to the version of claim 1 as refused by the examining division, the expression "when measured on a 50 mm long wire body portion" which originates from claim 10 as filed, has been appropriately reintroduced into feature (d) of claim 1.

Therefore the subject-matter of claim 1 does not extend beyond the content of the application as filed (Article 123(2) EPC).

3. *Novelty*

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

3.2 Document D1 discloses all the features contained in the pre-characterising portion of claim 1, namely an embolization device 20 for positioning in a blood vessel, comprising an elongated wire body 21 which, in its unloaded condition has a predetermined shape (see Figure 2B and column 4, lines 39 to 40) and an elongated shape during its insertion through a catheter 4 (see Figures 1, 2A and 4; column 8, lines 4 to 9), a centre line of the wire body being substantially straight during said insertion with the wire body in said elongated shape. After its release from the catheter (Figures 7 and 8), the wire body assumes a complexly curved shape which depends on the predetermined shape and on the blood vessel impact on the wire body (see column 3, lines 7 to 12 and column 9, lines 18 to 21).

Moreover, D1 discloses the characterising features (a), (b) and (d) of claim 1, as demonstrated below:

In Figure 2B of D1 the wire body has a helix-free section with an axial length l_1 (primary coil

structure 21) and a helical section with an axial length l_2 (secondary coil structure 28). The remaining straight portion at the distal end of the wire body can be reduced to zero (see column 4, lines 31 to 40 and lines 50 to 53). In this case, the overall length ($l_1 + l_2$) of the coil structure 22 is comprised in a range between 5 mm and 800 mm (see column 5, lines 30 to 32). Further knowing that the axial length l_1 is in the range of 100-400% of the axial length l_2 (see column 5, line 56 to column 6, line 2), it can easily be deduced therefrom that the range of the helix-free section of the claimed device (at least 20 mm) is covered by the teaching of D1. Therefore, feature (a) is at least implicitly disclosed by D1.

From the Figures 7 and 8 of D1 it is immediately derivable that at least the helix-free section in its complexly curved shape has a continuously varying curvature of the centre line. Therefore, feature (b) as claimed in also known from D1.

In view of numerous similarities between the devices according to document D1 and the present application as to the use of the device, the materials used for the wire and the respective diameters of the wires and the coil structures (see D1, column 5, lines 14 to 18 and column 6, lines 24 to 32), it results that the spring constant of the helix-free section c=P/e, when measured and calculated with the same standards and stretching apparatus, will necessarily be the same for both devices. Therefore, feature (d) is also implicitly disclosed by D1.

3.3 However, feature (c) of claim 1 is not disclosed by D1. When the wire body assumes its predetermined shape illustrated by Figure 2B, the end of the front end section is not curved, i.e. the centre line of the front end section is not turned back, let alone of at least 90° in direction of the back end in relation to the course of the centre line in the helix-free section.

3.4 It results therefrom that the subject-matter of claim 1 is novel over the prior art document D1 in accordance with Article 54(1) and (3) EPC.

4. *Remittal*

Since the decision of refusal was exclusively based on the ground of lack of novelty, now removed, the Board, in accordance with the appellant's request, finds it appropriate to remit the case to the first instance 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:

V. Commare T. Kriner