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D E C I S I O N
of 16 June 2005

Case Number: T 0399/04 - 3.2.2

Application Number: 95915819.7

Publication Number: 0793457

IPC: A61F 2/01

Language of the proceedings: EN

Title of invention:

A medical article for implantation into the vascular system of a patient

Patentee:

WILLIAM COOK EUROPE ApS, et al

Opponent:

Scimed Life Systems, Inc.

Headword:

-

Relevant legal provisions:

EPC Art. 54, 56, 89, 123(2)

Keyword:

"Novelty, inventive step (yes, after amendments),
clarity, (yes), added subject-matter (no) "

Decisions cited:

-

Catchword:

-



Case Number: T 0399/04 - 3.2.2

D E C I S I O N
of the Technical Board of Appeal 3.2.2
of 16 June 2005

Appellant: WILLIAM COOK EUROPE ApS
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 28 January 2004
revoking European patent No. 0793457 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: T. K. H. Kriner
Members: D. Valle
E. J. Dufrasne

Summary of Facts and Submissions

I. The appellant (patentee) lodged an appeal on 19 March 2004 against the decision of the opposition division posted on 28 January 2004 to revoke the European patent EP-B-793 457. The fee for the appeal was paid simultaneously and the statement setting out the grounds for appeal was received on 25 May 2004.

II. The Opposition division held that the subject-matter of claim 1 of the patent as granted and of claim 1 according to the auxiliary request then on file were not novel having regard to the document D2: DE-C-40 30 998.

III. The following further documents have been cited during the opposition proceedings:

D1: "Vena Caval Filter to prevent Pulmonary ...".

Radiology, 1985, 156, no 2, p. 315-320

D1*: US-A-4 619 246

D3: US-A - 4 643 184

D4: WO 93/12723

D5: US-A-4 873 978

D6: US-A-3 874 388.

IV. Oral proceedings took place on 16 June 2005.

The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted or in the alternative on the on the basis of the first auxiliary request filed with letter of 9 May 2005 or of the second auxiliary request filed at the oral proceedings.

The respondent (opponent) requested that the appeal be dismissed.

V. Claim 1 as granted reads as follows:

"A medical filter for intravenous implantation into a patient for the capture of thrombi, comprising a self expanding body shaped substantially into the form of a body of revolution, the surface of which is defined by wire members forming cells of a generally polygonal shape over at least a part of said surface, characterized in that said body of revolution (1, 2; 10, 11; 18; 30) has a diameter increasing continuously in an axial direction of the body from one end forming an apex (4, 13) towards the opposite end forming a base (5, 14)."

Claim 1 according to the first auxiliary request reads as follows:

"A medical filter for intravenous implantation into a patient for the capture of thrombi, comprising a self expanding body shaped substantially into the form of a body of revolution, the surface of which is defined by wire members forming cells of a generally polygonal shape over at least a part of said surface, characterized in that said body of revolution (1, 2; 10, 11; 18; 30) has a diameter increasing continuously in an axial direction of the body from one end forming an apex (4, 13) towards the opposite end forming a base (5, 14), said body of revolution (1, 2; 10, 11; 18; 30) being defined by a generatrix (6) forming a n-th order curve according to the formula $y = A \cdot x^n$ where for a

given point on the surface of the body x is the radius in the radial plane including said point, y is the distance from said radial plane to a plane parallel thereto including the geometrical apex, A is a constant and $n \geq 1$."

Claim 1 according to the second auxiliary request reads as follows:

"A medical occlusion device for implantation into the vascular system of a patient for closing a vessel lumen or defects in a vascular wall, comprising a self expanding body shaped substantially into the form of a body of revolution, the surface of which is defined by wire members forming cells of a generally polygonal shape over at least a part of the said surface, characterized in that said body of revolution (10, 11; 18; 30) has a diameter increasing continuously in an axial direction of the body from one end forming an apex (13) towards the opposite end forming a base (14), and that a separate relatively flat disc or umbrella shaped, elastic membrane (16, 19, 32) of a blood impermeable material is connected with said one end of said body of revolution (10, 11; 18; 30) and is coaxially therewith, said membrane (16, 19, 32) having a diameter (d_2) exceeding the maximal diameter (d_1) at the base of said body."

VI. In support of his request the appellant relied on the following submissions.

The subject-matter of claim 1 of the main and first auxiliary requests differed from the filter shown in Figure 5 of D2 by the feature according to which the

self expanding body is shaped substantially into the form of a body of revolution. Figure 5 of D2 disclosed a self expanding body which was shaped into the form of a six-sided pyramid. Moreover, there was no teaching in D2 to provide a form of the filter beyond the pyramid disclosed in Figure 5. D1/D1* showed what the expression "body of revolution" meant. Furthermore the description of the patent in suit (see paragraphs [0039] and [0040]) explained the meaning of the preamble of the claims, citing in particular that the bodies of revolution might have a conical shape. The meaning of "substantially" (... body of revolution) was that slight variations from the ideal geometrical form were comprised within the meaning of the claims, but certainly not a pyramidal form such the one shown in Figure 5 of D2.

As to claim 1 of the second auxiliary request, the occlusion device of D6, which had to be considered as representing the closest prior art, consisted of a membrane and a supporting structure for the membrane. The subject-matter of claim 1 differed from this device in that the supporting structure had substantially the form of a body of revolution as defined in this claim. Even if the skilled person could take in consideration the structures shown in D1 to D5, he never would replace the supporting structure shown in D6 by any of them, since D1 to D5 did not disclose supporting structures, but medical filters. Therefore a combination of the teaching of D6 with any of D1 to D5 was not obvious.

VII. The respondent disputed the views of the appellant. His arguments can be summarized as follows:

The subject-matter of Claim 1 of the main and of the first auxiliary request was not novel having regard to D2. D2 did not limit the number of the wire members defining the faces of the pyramid (see Claim 8). Consequently also a pyramid with an indefinite high number of sides, which inevitably had substantially the form of a body of revolution, was disclosed by D2.

Claim 1 of the second auxiliary request was not clear, since the expressions "the one end" and "the opposite end" of said body of revolution did not unequivocally define certain ends. Only the granted claim 14 made clear that "the one end" was the apical end of the body of revolution. However, since this claim was deleted in the second auxiliary request claim 1 now lacked clarity.

Furthermore the deletion of the description sections [0005] to [0007] containing references to the relevant prior art filters was not allowable with respect to Article 123(2) EPC, since it resulted in a much broader interpretation of the claims.

Furthermore, the subject-matter of claim 1 of the second auxiliary request did not involve an inventive step having regard to D6 in combination with any of the documents D1 to D5. D6 disclosed a medical occlusion device consisting of a self-expanding, umbrella-shaped structure and an impermeable membrane. Starting from D6, the object to be achieved was to provide an alternative support structure. The skilled person would recognize that the expandable self-supporting filters disclosed in D1 to D5 could also be used as structures

for occlusion devices, in particular since D6 (see column 2, lines 63 ff) showed that there was no strict delimitation between filters and occlusion devices. Consequently the use of a filter according to any of D1 to D5 as a support structure for the membrane of the occlusion device according to D6 was obvious.

Reasons for the Decision

1. The appeal is admissible.

2. *Main request and first auxiliary request*

D2 (see in particular Figure 5 and the corresponding passages of the description) undisputedly discloses a medical filter for intravenous implantation into a patient for the capture of thrombi, comprising a self expanding body, the surface of which is defined by wire members (42, 47) forming cells of a generally polygonal shape over at least a part of said surface, whereby said body has a diameter increasing continuously in an axial direction of the body from one end forming an apex (41) towards the opposite end forming a base.

In contradiction to the appellant's view the self expanding body of the filter of D2 is also shaped substantially into the form of a body of revolution.

The embodiment of Figure 5 having a body in the form of a six-sided pyramid is only one example of the pyramids disclosed by D2. The general teaching of D2, as for example disclosed in claim 8, is that the filter body can be composed of an undefined number of wires

converging to a point. In case that the number is sufficiently high, the filter inevitably acquires a substantially conical form defined by a generatrix forming a n-th order curve according to the formula $y = A \cdot x^n$ where for a given point on the surface of the body x is the radius in the radial plane including said point, y is the distance from said radial plane to a plane parallel thereto including the geometrical apex, A is a constant and $n = 1$.

Accordingly the subject-matter of claim 1 of the main and of the auxiliary requests is not novel.

3. *Second auxiliary request*

3.1 Procedural matters

Although the claims of the second auxiliary request (claims 8 to 21 as granted) had not been dealt with in the decision under appeal, the board decided to deal with these claims, since the parties had already expressed their opinion on this subject during the opposition procedure, and since they asked the board to decide whether to remit the case to the first instance or to deal directly with said subject during the present proceedings.

3.2 Amendments

The new claims 1 to 13 correspond to the granted claims 8 to 13 and 15 to 24. The features of these claims are disclosed in the published application (WO-A-95/27448) in claims 1, 9, 10, 19, (present claim 1), claims 2 to 4, 6, 8 and 11 to 17. The

description has been adapted to the newly filed claims, and the original Figure 1 has been deleted.

The argument of the respondent that the deletion of the sections [0005] to [0007] containing references to the relevant prior art filters was not allowable with regard to Article 123(2) EPC cannot be followed. Since the claimed subject-matter does no longer comprise any filter, the citation of prior art filters is not relevant for evaluating the invention.

Therefore the amended documents meet the requirements of Article 123(2), (3) EPC.

3.3 Clarity

The present claims are clear. The deletion of the granted claim 14 has no influence on the clarity of the present claim 1, since this claim is clear on its own. The expressions "the one end" and "the opposite end" unequivocally define the two ends of the body of revolution in axial direction, in particular since claim 1 clearly describes that the one end forms an apex and is connected to the membrane, and that the opposite end forms a base.

Therefore the present claims meet the requirements of Article 84 EPC.

3.4 Inventive step

The board shares the view of the parties that D6 has to be considered as representing the closest state of the art. This document discloses a medical occlusion device

for implantation into the vascular system of a patient for closing a vessel lumen or defects in a vascular wall, comprising a self expanding body (struts 91, sleeve 94) and a relatively flat disc or umbrella shaped, elastic membrane (8) of a blood impermeable material connected with one end of said body and coaxial therewith, said membrane having a diameter exceeding the maximal diameter at the base of said body.

Starting from D6, the object underlying the patent in suit is to be seen in simplifying the known occlusion device.

This object is achieved by the provision of a self-expanding body which is shaped substantially into the form of a body of revolution, the surface of which is defined by wire members forming cells of a generally polygonal shape over at least a part of the said surface, whereby said body of revolution has a diameter increasing continuously in an axial direction of the body from one end forming an apex towards the opposite end forming a base, and that the membrane is separate from the body.

The use of such supporting element is not suggested by the available prior art. All the documents D1 to D5 refer to filters and not to supporting elements for a membrane being part of an occlusion device. Moreover, although they are self-supporting, they are not provided to support further elements. Accordingly none of the documents D1 to D5 contains sufficient hints to lead the skilled person starting from D6 to the invention without any inventive skill being involved.

The respondent's argument that D6 proved that the fields of medical filters and of occlusion devices were sufficiently close to allow for the transfer of the teaching of one field to the other in an obvious way is not convincing. The respondent supports his assertion essentially on the fact that D6 cites the inventor of the filter disclosed in D3. However document D6 does not cite the filter of D3, but merely a catheter which has been developed by the same person who was the inventor of the filter of D3. Consequently the respondent's argumentation is not suitable to prove that the skilled person looking for a simple supporting element for an occlusion device would have considered filter elements.

From the above considerations, it follows that the subject-matter of claim 1 of the main request involves an inventive step.

Order

For these reasons it is decided that:

4. The decision under appeal is set aside.

5. The case is remitted to the first instance with the order to maintain the patent on the basis of the second auxiliary request consisting of:

Claims: 1 to 13,
Description: columns 1 to 8,
Figures: 1 to 9,

all filed at the oral proceedings on 16 June 2005.

The Registrar:

The Chairman:

V. Commare

T. Kriner