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**Datasheet for the decision
of 5 June 2024**

Case Number: T 1675/21 - 3.2.01

Application Number: 13153763.1

Publication Number: 2601910

IPC: A61F2/24, A61F2/06

Language of the proceedings: EN

Title of invention:

Implantable vascular device

Patent Proprietor:

Cook Medical Technologies LLC
Oregon Health & Science University

Opponents:

Boston Scientific Corporation
Abbott Cardiovascular Systems Inc.

Headword:

Relevant legal provisions:

EPC Art. 113(1), 76(1)

Keyword:

Right to be heard - opposition procedure - violation (no)
Divisional application - subject-matter extends beyond content
of earlier application (yes)

Decisions cited:

Catchword:



Beschwerdekammern
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Case Number: T 1675/21 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 5 June 2024

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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
15 July 2021 concerning maintenance of the
European Patent No. 2601910 in amended form.

Composition of the Board:

Chairman G. Pricolo
Members: M. Geisenhofer
O. Loizou

Summary of Facts and Submissions

I. The appeals were filed by the patent proprietor and opponent 2 against the interlocutory decision of the opposition division finding that, on the basis of the auxiliary request 3, the patent in suit met the requirements of the EPC.

II. Oral proceedings were held before the Board.

(a) The appellant-patent proprietor did not attend the oral proceedings as announced with letter dated 26 April 2024.

(b) The appellant-patent proprietor requested in writing that the decision under appeal be set aside and the patent be maintained in amended form on the basis of the main request or in the alternative on one of auxiliary requests 1-11, all requests filed with letter dated 27 June 2022.

Furthermore, the appellant-patent proprietor requested the refund of the appeal fee due to a violation of their right to be heard in opposition proceedings.

(c) The appellant-opponent requested that the decision under appeal be set aside and the patent be revoked.

(d) Opponent 1 (respondent to the patent proprietor's appeal and party as of right) requested that the appeal of the patent proprietor be dismissed.

III. Independent claim 1 of the **main request** reads as follows:

"A valve prosthesis (10) for implantation within a vascular vessel, comprising:

a valve structure having a first end (68) and a second end (69), a plurality of leaflets (25) that include an outer edge (112) and an inner edge (111), the plurality of inner edges (111) defining an orifice therebetween (117) at said first end (68) for allowing the passage of fluid in a first direction, the plurality of leaflets configured to co-apt with one another to restrict the passage of fluid in a second, opposite direction, the valve structure comprising a support frame (11), the support frame (11) being serpentine-shaped and generally co-extending along the outer edges (112) of the plurality of leaflets (25);

wherein the valve prosthesis further comprises a centering support structure (164) comprising one or more centering elements extending from the valve structure that engage the walls of the vascular vessel in a manner to facilitate centering of the orifice within the lumen of the vascular vessel during deployment of the valve prosthesis;

characterized in that the one or more centering elements comprise a second frame (31), which is expandable and is either:

attached to the first end (68) of the valve structure and extending longitudinally therefrom such that the second frame (31) is deployed prior to the valve structure; or

attached to the second end (69) of the valve structure and extending longitudinally therefrom such that the second frame (31) is deployed after the valve structure."

Claim 1 of **auxiliary request 1** and **auxiliary request 2** is identical to claim 1 of the main request. Auxiliary request 1 and 2 differ from the main request only in that dependent claims were amended.

Independent claim 1 of **auxiliary request 3** differs from claim 1 of the main request in that the term "*serpentine-shaped and generally co-extending along the outer edges*" was replaced by "*serpentine-shaped and co-extending along the outer edges*".

Claim 1 of **auxiliary request 4** and **auxiliary request 5** is identical to claim 1 of auxiliary request 3.

Independent claim 1 of **auxiliary request 6** differs from claim 1 of the main request in that the term "*serpentine-shaped and generally co-extending along the outer edges*" was replaced by "*serpentine-shaped and completely co-extending along the outer edges*".

Claim 1 of **auxiliary request 7** and **auxiliary request 8** is identical to claim 1 of auxiliary request 6.

Independent claim 1 of **auxiliary request 9** differs from claim 1 of the main request in that it additionally requires "*the valve structure (43) having a generally saddle-shaped serpentine configuration that includes a pair of the co-aptable leaflets*".

Claim 1 of **auxiliary request 10** is identical to claim 1 of auxiliary request 9.

Independent claim 1 of **auxiliary request 11** differs from claim 1 of the main request in that it additionally requires

"the valve structure (43) having a generally saddle-shaped serpentine configuration and wherein the plurality of leaflets (25) consists of two leaflets".

All requests comprise the following dependent claim (claim 10 in the main request):

"The valve prosthesis of claim 1, wherein the centering support structure (164) comprises at least one barb (16, 17, 18) to assist in anchoring the prosthesis within a vessel."

IV. The arguments of the appellant-patent proprietor (as far as they were relevant for the present decision) can be summarised as follows:

(a) The opposition division used different understandings of the term "generally co-extending" during the oral proceedings and in their written decision. The patentee hence could not present their arguments on novelty with regard to D6 using the meaning of the term "generally co-extending" underlying the final decision.

(b) The opposition division's decision was based on evidence that was not on file.

(c) The subject-matter of claim 10 of the main request (being present in all requests) was disclosed on page 9 of the description of the earlier application EP 1 545 392 A1 ("parent application").

V. The arguments of the appellant-opponent and the respondent to the appellant-patent proprietor's appeal (as far as they were relevant for the present decision) can be summarised as follows:

- (a) The opposition division used in their written decision the same claim construction of the independent claim as during the oral proceedings.
- (b) Enlarging the picture of D6d to a greater scale did not provide a new piece of evidence.
- (c) The subject-matter of claim 10 of the main request (being present in all requests) was only disclosed on page 47 of the description of the parent application when describing the embodiment of figure 53, however only in combination with further features that were not added to the claim.

Reasons for the Decision

Right to be heard (Article 113(1) EPC)

- 1. The right to be heard of the appellant-patent proprietor was not violated during opposition proceedings.
- 1.1 The appellant-patent proprietor alleged that the opposition division used different understandings of the term "*generally co-extending*" during the oral proceedings and in their written decision. The patent proprietor hence could not base their arguments on novelty with regard to D6 on the claim construction underlying the impugned decision.

The Board notes that the opposition division followed the patent proprietor's understanding of the term "*generally co-extending*" when discussing novelty with regard to D6d and D6d' in their written decision (cf.

reasons page 13, last six lines). The opposition division understood the term to mean "*on the whole co-extending*" with a certain inexactitude. There was hence no divergence in claim construction between the patent proprietor's arguments and the opposition division's written decision.

- 1.2 The appellant-patent proprietor further alleged that the opponents referred to new pieces of evidence during oral proceedings that were not on file.

As set out in the written decision on page 13, middle of the page, opponent 1 referred during oral proceedings before the opposition division to the digital photograph shown in D6d and D6d' and magnified it on their shared screen during the videoconference. D6d and D6d' were both filed with the notice of opposition, together with a web link to the high-resolution picture. Magnifying this picture on screen during an oral proceedings is in the Board's view equivalent to inspecting a printed picture on paper on short distance whereby the piece of evidence as such remains unchanged. The opponent 1 hence did not file a new piece of evidence but only referred to an enlarged view of a photograph already on file.

- 1.3 The Board hence cannot acknowledge that the appellant-patent proprietor's right to be heard was violated.

Accordingly, there is no basis for a refund of the appeal fee.

Amendments with regard to the parent application (Article 76(1) EPC)

2. The main request and auxiliary requests 1 - 11 contain subject-matter that lacks disclosure in the parent application.

2.1 Dependent claim 10 of the main request refers directly to independent claim 1 and requires that "*the centering support structure comprises at least one barb to assist in anchoring the prosthesis within a vessel*".

The same dependent claim is present in all auxiliary requests:

- claim 10 of auxiliary request 1;
- claim 9 of auxiliary request 2;
- claim 10 of auxiliary request 3;
- claim 10 of auxiliary request 4;
- claim 9 of auxiliary request 5;
- claim 10 of auxiliary request 6;
- claim 10 of auxiliary request 7;
- claim 9 of auxiliary request 8;
- claim 10 of auxiliary request 9;
- claim 9 of auxiliary request 10; and
- claim 7 of auxiliary request 11.

2.2 A valve prosthesis comprising a valve structure and a centering support structure attached to the valve structure, the centering support structure having barbs, was disclosed in the parent application only when describing the embodiment of figure 53 starting on page 46, line 23 of the description.

2.2.1 This embodiment uses a centering support structure in the form of a frame comprising two arms (165, 166). These arms provide a structure mirror of the two legs

(127, 129) of the valve structure and comprise a pair of barbs (172) extending from the distant ends of the arms (cf. figure 53). The frame is attached to the first end (68) of the valve structure (cf. figure 53).

- 2.2.2 The subject-matter of the impugned dependent claim is neither restricted to the particular type of frame (using two arms; being a structure mirror of the legs of the valve structure; being attached to the first end of the valve structure) nor to a particular location of the barbs (at the distant ends of the arms). These features, however, are inextricably linked to the function of the barbs to penetrate into the surrounding tissue to assist in anchoring the prosthesis within a vessel.
- 2.2.3 Omitting these features hence results in an unallowable generalization of the embodiment disclosed in the parent application.
- 2.3 The appellant-patent proprietor alleged that the subject-matter of the dependent claim in suit was disclosed on page 9, lines 1 - 11 of the description of the parent application as originally filed (cf. page 5 of the reply to the opponent's grounds of appeal: "Claim 11 as granted (claim 10 of the Main Request)").
 - 2.3.1 The parent application as originally filed refers generally to a valve including a covering with oppositely facing surfaces allowing flow in one direction and blocking flow in the opposite direction. The outer edge of the covering resiliently engages the wall of the vessel (cf. summary of the invention on page 3, lines 1 - 10).

2.3.2 In the subsequent part of the description on page 3, line 11 - page 10, line 2 a plurality of different aspects of this prosthesis are described:

As an example only:

- According to one aspect of the invention (cf. page 3, starting in line 11), the prosthesis has a covering comprising a plurality of leaflets.
- The number of leaflets is two, three or more (cf. page 4, lines 2 and 3).
- The frame can be covered by a piece of biocompatible material (cf. page 3, lines 23 and 24).
- The valve portion can include a saddle-shaped, two-leaflet valve having a serpentine-shaped frame (cf. page 4, lines 6 - 9).
- The centering portion can be formed separately or integral with the valve portion (cf. page 4, lines 12 - 14).
- The centering support structure may extend from the proximal end, from the distal end, or both ends (cf. page 4, lines 16 - 18).
- The centering structure can be a frame, an expandable stent, a helical coil, an elongate projection or strut, an inflatable member, or an extended portion cut from the same cannula used to form the valve portion (cf. page 4, lines 18 - 23).

Further aspects were cited until page 10 of the description whereby the enumeration of various aspects *inter alia* comprises a passage on page 9, lines 1 and 2 stating that one or more barbs can be attached to the frame for anchoring the device in the lumen of a vessel.

2.3.3 The parent application as originally filed thus discloses on pages 3 - 10 of the description a multiplicity of individual features which might be chosen or not, including the option of using barbs attached to the frame.

2.3.4 However, there is no clear and unambiguous disclosure for a particular prosthesis having the combination of features claimed (i. e. having the features cited in independent claim 1 and in dependent claim 10). The skilled person has no hint or incentive to choose exactly such a combination of features beyond the possible combinations of the plurality of aspects identified on pages 3 - 10.

2.4 The subject-matter of dependent claim 10 of the main request hence lacks disclosure in the parent application. The main request thus does not comply with the requirements of Article 76(1) EPC.

Since a dependent claim having the exact wording of claim 10 of the main request is present in all auxiliary requests (see point 2.1 above), the auxiliary requests are not allowable for the same reasons.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



M. Schalow

G. Pricolo

Decision electronically authenticated