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**Datasheet for the decision  
of 4 November 2013**

**Case Number:** T 1131/11 - 3.2.08

**Application Number:** 02704180.5

**Publication Number:** 1351625

**IPC:** A61F 2/06

**Language of the proceedings:** EN

**Title of invention:**  
Stent

**Applicant:**  
Covidien LP

**Headword:**  
-

**Relevant legal provisions:**  
EPC Art. 54

**Keyword:**  
"Novelty (yes)"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 1131/11 - 3.2.08

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.08  
of 4 November 2013

**Appellant:** Covidien LP  
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**Representative:** Elsy, David  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 8 December 2010  
refusing European patent application  
No. 02704180.5 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman:** T. Kriner  
**Members:** R. Ries  
D. T. Keeling

## Summary of Facts and Submissions

I. In its decision dated 8 December 2010 refusing European patent application No. 02704180.5, the examining division held that the subject matter of claim 1 of the main, first and second auxiliary requests then on file lacked novelty over the technical disclosure of documents

D2: US-A-6 132 460 or

D3: US-A-6 132 461, respectively

II. On 3 February 2011, the appellant (applicant) lodged an appeal against the decision of the examining division and paid the appeal fee on the same day. The statement setting out the grounds of appeal was received on 18 April 2011.

III. In an official communication annexed to the summons to oral proceedings, the Board gave a preliminary assessment of the case. In conclusion, a continuation of the file on the basis of the set of claims according to the first auxiliary request enclosed with the grounds of appeal of 18 April 2011 was considered possible.

IV. Enclosed with its response dated 10 October 2013 to the Board's communication, the appellant submitted a revised set of claims as the main request replacing all former requests and a description adapted accordingly. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 13 of this request.

V. Independent claims 1 and 11 of the main request read as follows:

"1. A stent comprising: a stent body (210) having a stent axis (X-X);  
the stent body including a structural member (214) extending in an undulating pattern about a circumference of the stent body;  
the structural member including a plurality of segments (216, 218, 220, 222, 224, 226) that extend generally longitudinally along the stent axis (X-X);  
the structural member (214) including a plurality of arcuate peaks (217, 225) and valleys (219, 223) connecting adjacent segments (216, 218, 220, 222, 224, 226) characterized in at least some of the segments (216, 220, 222, 226) having widths that taper continuously along their lengths from an enlarged width (W1) adjacent connection location (227) towards a reduced width (W2) adjacent the peaks (217, 225) and valleys (219, 223) as the at least some segments (216, 220, 222, 226) extend longitudinally along the stent axis (X-X)."

"11. A method of making a stent comprising:  
constructing a stent body having a stent axis (X-X);  
defining structural members including a plurality of segments (216, 218, 220, 222, 224, 226) connected by a plurality of arcuate peaks (217, 225) and valleys (219, 223), the plurality of segments (216, 218, 220, 222, 224, 226) extending generally longitudinally along the stent axis (X-X)  
wherein that said defining step includes providing at least some of the segments (216, 220, 222, 226) with

widths that taper continuously along their lengths from an enlarged width (W1) adjacent connection location (227) towards a reduced width (W2) adjacent the peaks (217, 225) and valleys (219, 223) as the at least some segments (216, 220, 222, 226) extend longitudinally along the stent axis (X-X)."

VI. The appellant's arguments relevant to the present decision are summarized as follows:

Independent claims 1 and 11 were reformulated by introducing the following amendments:

(i) the feature "the structural member (214) including a plurality of arcuate peaks (217, 225) and valleys (219, 223) connecting adjacent segments (216, 218, 220, 222, 224, 226)" and

(ii) the feature "peaks (217, 225) and valleys (219, 223)" supplementing the feature "adjacent".

The new formulation of the features of the independent claims including the feature "along their length" defined a tapering width which changed its cross-sectional dimension along a length of a longitudinal segment (also called strut) from an enlarged width W1 towards a reduced width W1. The reformulated independent claims let not doubt as to where the connecting locations, peaks and valley and the segments were located in the structural member.

Document D2 disclosed a structural member of a stent body comprising straight segments interconnected by peaks and valleys whereby the cross-sectional dimension of the straight segments was uniform and constant

rather than designed to have a tapering width as claimed in the present application.

Likewise, document D3 defined beams (14) and straight line segments (16, 18, 20, 2, 24 and 26) which propagated between respective peaks and valleys and had uniform cross-sectional dimension throughout their length, as shown in Figure 4 of D3 and column 3, line 66 to column 4, line 16.

The stent according to claim 1 and the method of producing it according to independent claim 11 were therefore novel with respect to the disclosure of documents D2 or D3, respectively.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Novelty; Article 54 EPC

For the following reasons, the objection of lack of novelty of the subject matter of independent claims 1 and 11 over D2 or D3, respectively, set out in the impugned decision, is no longer valid.

- 2.1 Documents D2 and D3 are concerned with a stent of the claimed type and are assigned to the inventor of the present application. Although these documents relate to other applications of the same applicant, essentially the same notions and definitions as those used in the present application are used.

The passage in column 3, lines 20 to 33 of document D2 unambiguously emphasizes the fact that the straight-line segments (14) of the stent body depicted in Figures 4 and 5 have uniform cross-sectional dimensions throughout their length. More specifically, this passage of document D2 discloses that

(i) the width  $W'$  shown in Figure 5 at the apices of the peaks (17, 21, 25) and valleys (19, 23) is narrower than the width  $W$  of the straight-line segments (16, 18, 20, 22, 24, 26) and

(ii) the width of the peaks (17, 21, 25) and valleys (19, 23) gradually increases from width  $W'$  at the apices to width  $W$  of the straight-line segments (16, 18, 20, 22, 24, 26).

However, document D2 does not disclose that at least some of the straight-line segments (16, 18, 20, 24, 26) of the known stent continuously taper (i.e. change the cross-sectional dimension) as the segment extends along the stent axis from a connection location to a peak or valley, respectively.

Likewise, document D3 discloses in column 3, lines 66 to column 4, line 16 an intraluminal stent with a stent body which comprises beams (14) and straight-line segments (16, 18, 20, 22, 24 and 26) propagating between respective peaks and valleys and exhibiting uniform cross-sectional dimensions (width  $W$ ), whereby the width of the peaks (17, 21, 25) and valleys (19, 23) gradually increases from width  $W'$  at the apices of the peaks and valleys to width  $W$  at the straight segments.

Accordingly, document D2 as well as D3 disclose a stent body structural member comprising straight-line

segments which exhibit uniform and constant cross-sectional dimensions.

- 2.2 By contrast, the structural member of the stent body set out in claim 1 of the present application comprises (straight) segments which are interconnected by connection locations (e.g. Figure 11, 227), arcuate peaks (e.g. 217) and valleys (e.g. 219), wherein the cross-sectional dimension of the straight segments tapers continuously along their length from an enlarged width W1 adjacent connection location (227) towards a reduced width W2 adjacent the peaks (217, 225) and valleys (219, 223) as the segments (216, 220, 222, 226) extend longitudinally along the stent axis (X-X).

The evaluation of the technical contents of documents D2 and D3 thus shows that none of the cited prior art documents discloses the technical features of the intraluminal stent claimed in the present application. Consequently, the subject matter of independent claim 1 is novel over the disclosure of document D2 or D3, respectively.

- 2.3 The same arguments apply to independent claim 11 which is concerned with a method of producing a stent defined by the same features as the stent set out in claim 1.

- 2.4 Dependent claims 2 to 10 and 12 and 13 relate to preferred embodiments of the stent of claim 1 and the method set out in claim 11, respectively. Therefore, these claims equally meet the requirement of Article 54 EPC.



3. Given that the decision of the examining division refusing the application was exclusively based on the objection of lack of novelty, which has now been overcome, the Board considers it appropriate to set aside the impugned decision and to remit the case to the department of first instance for examination of the further requirements of the EPC.

## **Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the examining division for further prosecution on the basis of the main request enclosed with the appellant's letter of 10 October 2013.

The Registrar:

The Chairman:

V. Commare

T. Kriner