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**Datasheet for the decision  
of 23 November 2008**

**Case Number:** T 1232/06 - 3.2.02

**Application Number:** 96902173.2

**Publication Number:** 0812155

**IPC:** A61B 17/22

**Language of the proceedings:** EN

**Title of invention:**  
Surgical wire basket extractor

**Patentee:**  
BOSTON SCIENTIFIC CORPORATION

**Opponent:**  
TERUMO CORPORATION

**Headword:**  
-

**Relevant legal provisions:**  
EPC Art. 56

**Relevant legal provisions (EPC 1973):**  
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**Keyword:**  
"Inventive step (no)"

**Decisions cited:**  
-

**Catchword:**  
-



Case Number: T 1232/06 - 3.2.02

**DECISION**  
of the Technical Board of Appeal 3.2.02  
of 23 November 2008

**Appellant I:**  
(Patent Proprietor)

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**Appellant II:**  
(Opponent)

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**Representative:**

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**Decision under appeal:**

Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
30 May 2006 concerning maintenance of European  
patent No. 0812155 in amended form.

**Composition of the Board:**

**Chairman:** T. Kriner  
**Members:** D. Valle  
M. J. Vogel

## Summary of Facts and Submissions

I. The appellant I (proprietor) lodged an appeal on 9 August 2006 against the decision of the opposition division posted on 30 May 2006 to maintain the patent in amended form. The fee for the appeal was paid simultaneously and the statement setting out the grounds for appeal was received on 6 October 2006.

The appellant II (opponent) lodged also an appeal against said decision on 8 August 2006. The fee for the appeal was paid simultaneously and the statement setting out the grounds for appeal was received on 9 October 2006.

II. The patent was opposed on the basis of Article 100(a) EPC (lack of inventive step).

III. The following documents are relevant for the present decision:

D1 = WO - A - 94/18888

D2 = JP - A - 53-30875 and a translation in English.

IV. Oral proceedings have been held on 25 November 2008.

At the end of the oral proceedings the appellant I requested that the decision under appeal be set aside and the patent be maintained as granted or auxiliarily on the basis of one of the 3 auxiliary requests filed with the letter of 26 September 2008.

The appellant II requested that the decision under appeal be set aside and that the patent be revoked.

V. Claim 1 of the main request reads as follows:

"A surgical extractor for removing an object from a body including a retrieval basket (15) with distal (21) and proximal (19) ends and a retractable sheath (17) which in a first position retains said retrieval basket (15) in a compact condition and in a second position frees said retrieval basket (15) for expansion to form an enlarged basket for retrieving an object, said basket (15) comprising a plurality of wires (28) extending between said distal and proximal ends (21, 19) of said basket (15), each of said wires (28) comprising an individual strand (22) extending from one of said distal and proximal ends (21, 19) of said basket (15) and a plurality of spaced filaments (24) extending between said strand (22) and the other of said distal and proximal ends (21, 19) of said basket (15), said sheath (17) covering both said strands (22) and said filaments (24) when in said first position, characterized in that a diameter of said strands (22) is greater than a diameter of said filaments (24)."

Claim 1 of the first auxiliary request differs from claim 1 of the main request by the following deletions:

"comprising an individual strand (22) extending from ~~one of said distal and proximal ends (21, 19)~~ of said basket (15) and a plurality of spaced filaments (24) extending between said strand (22) and ~~the other of said distal and proximal ends (21, 19)~~ of said basket (15)".

Claim 1 of the second auxiliary request reads as follows (amendments with regard to the main request are crossed out or printed in bold):

"A surgical extractor for removing an object from a body including a retrieval basket (15) with distal (21) and proximal (19) ends and a retractable sheath (17) which in a first position retains said retrieval basket (15) in a compact condition and in a second position frees said retrieval basket (15) for expansion to form an enlarged basket for retrieving an object, said basket (15) comprising ~~a plurality of~~ **only two** wires (28) extending between said distal and proximal ends (21, 19) of said basket (15) each of said wires (28) comprising an individual strand (22) extending from one of said distal and proximal ends (21, 19) of said basket (15) and a plurality **in the range of four to sixteen** of spaced filaments (24) extending between said strand (22) and the other of said distal and proximal ends (21, 19) of said basket (15), said sheath (17) covering both said strands (22) and said filaments (24) when in said first position, characterized in that a diameter of said strands (22) is greater than a diameter of said filaments (24)."

Claim 1 of the third auxiliary request is a combination of claim 1 of the first and second auxiliary request.

VI. The appellant I argued essentially as follows.

The subject-matter of claim 1 of the main and of the first auxiliary request did involve an inventive step. The skilled person could use the teaching of D2 in a device according to D2, however he would not. There was

no reason to consider the teaching of D2, since the skilled person would not expect any improvement in the device according to D1 in doing so. D1 taught that the increase in the number of wires which resulted in a high number of contact points with entrapped objects, did not reduce the openings between adjacent strands appreciably. Hence, D1 did already achieve the object underlying D2.

Furthermore, the technical disclosure in a document of the prior art should be considered in its entirety. It was not justified to isolate parts of a document from their context in order to derive from these parts technical information which would be distinct from the integral teaching of the document (see: "Case law of the Boards of Appeal", edition 2006, page 149). D1 disclosed individual, independent, untwisted wires. On the contrary the disclosure of D2 concerned twisted threads. Consequently a combination of the teaching of the two documents from the sight of the skilled person would be highly improbable.

The distinguishing features of the second and third auxiliary requests concerned the number of wires (only two) and of filaments per wire (four to sixteen). These selections were not suggested by the available prior art. In case where the wires were made by bundling together several filaments like in D2, the choice of the number of wires and filaments always involved a compromise between the number of filaments needed to retain objects and the overall size of the wires to be lodged in the sheath (see paragraph 0012 of the patent in suit). Therefore D2 showed only two filaments per

wire, and the skilled person would not provide four to sixteen filaments per wire.

- VII. The appellant II contested the statements of the appellant and argued that all the requests on file did not involve an inventive step having regard to D1 and D2.

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Inventive step*
- 2.1 Main request and first auxiliary request

D1 which undisputedly represents the most relevant state of the art discloses a surgical extractor for removing an object from a body including a retrieval basket (15) with distal and proximal ends and a retractable sheath (17) which in a first position retains said retrieval basket in a compact condition (see Fig. 3) and in a second position (see Fig. 2) frees said retrieval basket for expansion to form an enlarged basket for retrieving an object, said basket comprising a plurality of wires (21a,b; 22a,b; 23a,b; 24a,b) extending between said distal and proximal ends of said basket (15).

Starting from D1, the object underlying the patent in suit may be seen in further facilitating the capture of calculi in the basket and at the same time increasing the number of contact points with entrapped objects in

a distal portion of the retrieval basket (see column 4, lines 50 to 54 of the patent in suit).

According to claim 1 of the main request this object is achieved by the provision of a retrieval basket wherein each of said wires comprises an individual strand extending from one of said distal and proximal ends of said basket and a plurality of spaced filaments extending between said strand and the other of said distal and proximal ends of said basket, said sheath covering both said strands and said filaments when in said first position, wherein a diameter of said strands is greater than a diameter of said filaments, and according to claim 1 of the first auxiliary request this object is achieved by the provision of a retrieval basket wherein each of said wires comprises an individual strand extending from said proximal end of said basket and a plurality of spaced filaments extending between said strand and said distal end of said basket, said sheath covering both said strands and said filaments when in said first position, wherein a diameter of said strands is greater than a diameter of said filaments.

D2 which belongs to the same field as the patent in suit, since it also deals with a surgical extractor, teaches (see in particular page 2, central paragraph, and Figure 2) to form the rear part of a retrieval basket so coarse that it is easy to place calculi into the basket, and to form the front part so fine that it is more difficult, during extraction, to drop the collected calculi from the basket. The fine part extends from the distal end to the middle of the basket and consists of a plurality of spaced filaments,



whereas the coarse part is formed by integrating groups of wires into a single strand which extends to the proximal end of the basket. Hence the diameter of each strand is inevitably greater than the diameter of the filaments.

By using the teaching of D2 in order to achieve the object underlying the patent in suit, the skilled person would in an obvious way either replace the basket of D1 by the basket suggested by D2 or modify the basket of D1 according to the suggestions given in D2. In both cases this would inevitably result in a surgical extractor having all features of claim 1 of the main and of the first auxiliary request.

The arguments of the appellant I according to which the subject-matter of claim 1 does involve an inventive step are not convincing.

The passage of D1 stating that the increase in the number of wires does not reduce the openings between adjacent strands appreciably, refers to the embodiment of Figure 2, where the wires are bundled together in strands by soldering them in pairs at the distal and proximal ends. D1 does not say that an increasing number of wires does not effect the openings. On the contrary, the above statement comprises the adverb "appreciably" which clearly shows that there is a restriction of the openings. Moreover, page 3, lines 8 to 10 states that additional wires could be advantageous because increasing their number increases the number of contacts between the basket and any entrapped calculi. The remark contained in D1 and cited by the appellant I appears therefore to be limited to a

specific embodiment, and has not to be construed as a general rule. Hence there is no reason to assume that the skilled person would not expect any improvement when using the teaching of D2 in the device according to D1.

The further objection of the appellant I that a combination of D1 and D2 would be highly improbable, since D1 taught to employ individual, independent untwisted wires, whereas D2 concerned twisted threads is irrelevant for the assessment of inventive step in the present case. With respect to the object underlying the patent in suit, it is obvious that the skilled person would not consider the different types of wires used in D1 and D2, but would concentrate on the teaching of D2 concerning the provision of strands and filaments in a retrieval basket.

Therefore, the subject-matter of claim 1 of the main request and of the first auxiliary request does not involve an inventive step.

## 2.2 Second and third auxiliary request

Claim 1 of the second auxiliary request and claim 1 of the third auxiliary request differ from claim 1 of the main request and claim 1 of the first auxiliary request by two additional features concerning the number of wires (only two) and of filaments per wire (four to sixteen), respectively.

Since the patent in suit does not give any hint which object might be achieved by this number of wires and filaments, it has to be regarded as an arbitrary

selection. Furthermore it is obvious from the general teaching of D2 that the number of wires should be selected as low as possible and the number of filaments as high as possible. Hence the selection of the number of wires and filaments is a mere question of optimization within narrow ranges which can be done by the skilled person without the exercise of an inventive activity.

The argumentation of the appellant I according to which the inevitable compromise between the number of the filaments per wire would not allow the claimed selection is not convincing. It is true that D2 refers to retrieval baskets where the wires are formed by bundling a limited number of filaments. However, this does not mean that the skilled person would only consider a low number of filaments per wire, since the general teaching of D2 is not limited to the case where the wires are formed by bundling filaments. The general teaching of D2 is to increase the number of filaments compared to the number of wires in order to trap the calculi during extraction.

Therefore the subject-matter of claim 1 of the second and third auxiliary request does also not involve an inventive step.

**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:

V. Commare

T. Kriner