

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen
(D) [] No distribution

D E C I S I O N
of 4 February 2003

Case Number: T 1039/99 - 3.2.2

Application Number: 90307811.1

Publication Number: 0409569

IPC: A61B 17/12

Language of the proceedings: EN

Title of invention:

Apparatus for applying surgical clips in laparoscopic or endoscopic procedures

Patentee:

United States Surgical Corporation

Opponent:

ETHICON ENDO-SURGERY, INC.

Headword:

-

Relevant legal provisions:

EPC Art. 84, 123(2)

Keyword:

"Claims clear (yes), amendments (allowable)"

Decisions cited:

-

Catchword:

-



Case Number: T 1039/99 - 3.2.2

D E C I S I O N
of the Technical Board of Appeal 3.2.2
of 4 February 2003

Appellant: United States Surgical Corporation
(Proprietor of the patent) 150 Glover Avenue
Norwalk,
Connecticut 06856 (US)

Representative: Marsh, Roy David
Hoffman, Eitle
Patent- und Rechtsanwälte
Postfach 81 04 20
D-81904 München (DE)

Respondent: ETHICON ENDO-SURGERY, INC.
(Opponent) 4545 Creek Road
Cincinnati,
Ohio 45242-2839 (US)

Representative: Mercer, Christopher Paul
Carpmaels & Ransford
43 Bloomsbury Square
London WC1A 2RA (GB)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 3 September 1999
revoking European patent No. 0 409 569 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: W. D. Weiß
Members: S. S. Chowdhury
U. J. Tronser

Summary of Facts and Submissions

I. The appellant (patent proprietor, United States Surgical Corporation, USA) lodged an appeal against the decision of the opposition division to revoke the patent No. 0 409 569. The decision was dispatched on 3 September 1999.

The appeal and the fee for the appeal were received on 3 November 1999. The statement setting out the grounds of appeal was received on 27 December 1999.

The opposition was filed against the whole patent and based on Article 100(a), 100(b), and 100(c) EPC (lack of novelty and inventive step, the European patent did not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a skilled person, and the patent contained subject-matter not originally disclosed).

The opposition division decided that claim 1 of the main request did not comply with Article 123(2) EPC, and claim 1 of the auxiliary request did not comply with the requirement of Article 123(3) EPC, and revoked the patent, accordingly.

II. The appellant requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of claims 1 to 14 filed as Annex B with the letter of 20 December 2002.

The respondent requested that the appeal be dismissed. In the event that the patent is maintained by the Board, the respondent requested that the case be remitted to the opposition division for a decision on

the other grounds of opposition raised by the opponent.

III. The independent claim 1 of the main request reads as follows:

"Apparatus for endoscopic application of a surgical clip to body tissue, which comprises:

(a) a frame configured and dimensioned for manual gripping;

(b) an elongate member connected to said frame and extending distally therefrom, said member including:

i) means for holding a surgical clip;

ii) jaws positioned at the distal end thereof; and

iii) means (133', 238') for closing said jaws about said clip; the apparatus further including:

(c) seal means (401') sealing between the member and the jaw closing means (133', 238') and comprising a sealing block located between the elongate member and the jaw closing means (133', 238'), the block having U-shaped upper and lower portions to inhibit flow of gas from the distal end of the elongate member to the proximal end of the member

(d) means for storing within the elongate member a plurality of said surgical clips distally of the seal means (401')

(e) means (143', 229') within the elongate member and actuated at the frame for advancing the clips in

sequence to the jaws, for closure one by one between the jaws; wherein

(f) the seal means (401') defines a rectangular aperture (401'c) through which together extend in close contiguity and side by side flat portions of the jaw closing means (133', 238') and the clip advancing means (143', 229'); and

(g) within the aperture, the jaw closing means (133', 238) and clip advancing means (143', 229') each move relative to the elongate member and to each other."

IV. In their written and oral submissions the parties argued as follows:

Appellant

The patent application was directed to the person skilled in the art and he would derive more than was literally disclosed therein since the technical content was more important than the detailed language used.

The opposition division had misunderstood paragraph (c) of claim 1. It was clear from Figures 44 and 55 that the sealing block 401' lay between the elongate tube and the jaw closing bar. "Sealing between" could mean either that a seal was provided between the tube and the jaw closing bar, or that the sealing function was provided at a location between the tube and the bar, and the person skilled in the art would clearly take the second meaning since the first meaning was not consistent with the description.

Respondent

Claim 1 was interpreted by the appellant by reference to the description, but neither this interpretation nor the opposition division's was consistent with the description. Therefore, the normal meaning of words should be taken when interpreting the claim. In clause (b) of the claim the expression "said member including" led to some confusion with the features of clause (g) since the moving parts defined there could not move relative to the member if they were included in it.

The word "between" had a well defined meaning and its use led to confusion of clause (c) since there was no sealing block disclosed between the elongate member and the jaw closing means. The sealing block did not seal anything, the sealing function was performed by close tolerance of parts and by silicone grease, and the block only held these parts together. Moreover, the definition of the seal in the claim was an intermediate generalisation since this part of the claim was based on Figure 61 which showed a specific seal in detail whereas the seal was claimed generically.

Alternatively, the interpretation of the opposition division in this respect could be taken, which also meant that this feature comprised new subject-matter. Moreover, this seal did not meet the object of the invention as set out in column 2, if the appellant's interpretation was taken.

Therefore, there was considerable doubt as to where the seal was located, what its function was, and how it met the object of the invention which was to prevent gases from communicating between the interior and exterior of the body. The function of the sealing block according to the appellant's interpretation of the claim was not to be found in the description. In the case of

Article 123(2) EPC the applicant did not get the benefit of the doubt, and unless the appellant could prove his case convincingly the patent should be revoked.

The skilled person would consider claim 1 to require the seal means to form a seal between itself and the elongate member, so the opposition division's interpretation of claim 1 in their decision was correct. The A publication would not destroy the novelty of a subsequent application which claimed a seal extending from the inner surface of the endoscope to the outer surface of the jaw closing means. For all these reasons claim 1 was invalid under Article 123(2) EPC.

The word "inhibit" had no basis in the application as filed. The application as originally filed referred exclusively to "preventing" gas flow. There was also no disclosure originally of means for storing surgical clips distally of "seal means", only distally of a sealing block. There was also no disclosure originally of a rectangular aperture formed by "seal means", only of a rectangular aperture formed by a sealing block together with a layer of silicone grease. For all these further reasons also claim 1 was invalid under Article 123(2) EPC.

If, as the appellant argued, the words "sealing between" did not mean a hermetic seal between the specific respective surfaces of the tube and the jaw closing bar, then it conceded that the claim did not contain any feature that met the object of the invention, which was to prevent gases from communicating between the interior and exterior of the

body. Therefore, the claim did not satisfy Article 84 EPC.

Reasons for the Decision

1. The appeal is admissible.

2. The examination procedure that led to the patent in suit culminated in the grant of claims that defined an invention whose central feature was seal means to inhibit flow of gas from the distal end of the elongate member to the proximal end of the member. The disclosure of the application as originally filed will, therefore, first be examined with the seal feature in mind, to discover what this disclosure covers, after which the meaning of claim 1 will be investigated, and then the invention currently claimed will be examined to see whether it meets the requirements of Articles 123(2) EPC and 100(c) EPC.
 - 2.1 The A1 publication states in column 1, lines 33 to 38 that it was a general requirement that any instrumentation inserted into the body be sealed, i.e., provisions must be made to ensure that gases do not enter or exit the body through the laparoscopic or endoscopic incision as, for example, in surgical procedures in which the surgical region is insufflated. Accordingly, one of the objects of the invention, as set out in column 2, lines 19 to 23, is to provide a surgical clip applier which is adapted to prevent gases from communicating between the interior and exterior of the body during an endoscopic procedure.

Before a detailed description of the embodiments of the

invention commences on page 11, two particular seals are mentioned in column 10, lines 16 to 27. One is a seal between the endoscope and a trocar cannula, i.e. is a seal external to the endoscope, and another is a seal for the internal moving parts of the endoscopic portion. Further details of the external seal are given in column 35, line 39 to 53, and further details of the seal for the internal moving parts are given in column 35, line 54 onwards.

The original main claims 1 to 3 were concerned only with the endoscope, which is fair enough since this is an independent vendible product and may be claimed independently of a trocar cannula. The current claims claim an endoscope and a seal for the internal moving parts thereof, which is consistent with the original disclosure discussed above. Present claim 1 includes details of the seal in clauses (c) and (f) thereof, which details are based on the passages in columns 35 and 36 and Figure 61.

3. *Interpretation of claim 1*

There was much discussion amongst the parties as to the meaning of some expressions in claim 1, and this also has a bearing on the question of new subject-matter. It is the Board's view that a pragmatic approach must be taken regarding the clarity of the claim, bearing in mind that one main purpose of a claim is to sufficiently and clearly delimit the claimed subject-matter from the prior art. In any case the claim must be interpreted having regard to the description and in the spirit of synthetical propensity. The following is the Board's understanding of the disputed expressions:

"Including": It is quite clear in the context that the sealing block, the jaw closing means, the clip advancing means, etc are independent of and housed within the elongate member or endoscope. This is clear from a reading of the second and third embodiments described with reference to Figures 27 to 45 and 46 to 60, respectively. No confusion arises from the use of this word in the context.

"Between": It is clear from the second embodiment described with reference to Figures 27 to 45 that the sealing block, which has a rectilinear configuration, cannot form a gas seal between the inner surface of the endoscope tube 144', which has a circular section, and the moving parts within the sealing block. Therefore, the opposition division's interpretation of this part of the claim is wrong. However, the true meaning of the claim has now been brought out by the new wording of clause (c).

"Sealing block": This term is used simply as a name for the feature 401' and is not intended to define its function literally, it only implies that some sealing function is associated with it, namely a seal is provided between moving parts within it. There is no confusion in this respect once the description is read.

Moreover, the degree of sealing required of this seal is also not in doubt. It is clear that a hermetic seal is neither possible nor necessary since the gas system is in dynamic equilibrium, what little gas is lost is replenished from a gas source, and the seal is only required to provide substantial resistance to gas flow. In fact the degree of sealing would be comparable to that provided between the endoscope and a trocar, which

is conventionally provided by a slit resilient membrane, and is also not a hermetic seal.

It is plausible that the sealing block 401' as shown in Figure 61 would provide the necessary resistance to gas flow between the moving parts 229' and 238', either by virtue of the close tolerance between the parts alone, or when reinforced by silicone grease if further resistance to gas flow is necessary. The person skilled in the art would find the correct trade-off between conflicting design constraints such as the degree of sealing and the precision of tolerance without undue effort. As regards inhibiting gas flow between the sealing block 401' and the cartridge halves 228', 229' of the third embodiment, it is also plausible that the sealing block 401' would provide adequate resistance to gas flow here.

In this respect, the use of the word "inhibit" reflects the practical situation rather better than the original word "prevent" and is also appropriate in the claim.

The Board sees no confusion in the claim with the above interpretation of its features, and moreover, sees no inconsistency with the application as originally filed, as will emerge from the next part of this decision.

4. *Amendments*

With the above in mind the allowability of the amendments to claim 1 may now be examined. Present claim 1 has the greatest overlap with claim 2 of the application as originally filed. Claim 1 contains the following features not included in original claim 2:

- (i) The frame is configured and dimensioned for manual gripping;
- (ii) Means for holding a surgical clip;
- (iii) Seal means comprising a sealing block having U-shaped upper and lower portions sealing between the member and the jaw closing means;
- (iv) The sealing block is located between the elongate member and the jaw closing means;
- (v) To inhibit flow of gas from the distal end of the elongate member to the proximal end of the member;
- (vi) Means **within the elongate member and actuated at the frame** for advancing the clips in sequence to the jaws, for closure one by one between the jaws;
- (vii) The seal means defines a rectangular aperture through which together extend in close contiguity and side by side flat portions of the jaw closing means and the clip advancing means;
- (viii) Within the aperture, the jaw closing means and clip advancing means each move relative to the elongate member and to each other.

4.1 All the above features are supported by the application as originally filed as follows:

The features (i) and (ii) and (vi) are implicit from the intended use and description of the device, and

were not controversial during the appeal procedure.

The feature (iv) is derivable from Figures 44 and 55, where it can be seen clearly that the sealing block is located between the elongate member and the jaw closing means, and in column 36 it is said that the sealing block 401' may be located within the cover tube 144' or the cartridge portions 228' and 239'.

The features (iii), (v), (vii) and (viii) are described in column 35, line 54 to column 36, line 11 in conjunction with Figure 61. The combination of features defined in the claim is sufficient to meet the object of the invention as may be seen from point 3 above.

The respondent argues that the sealing block was disclosed only in conjunction with silicone grease, but this argument is wrong since the silicone grease is stated to be an optional feature in column 36, which says that this grease **may** be employed, and in column 10, lines 24 to 27, where a gas seal formed only by close tolerances of the internal moving parts is disclosed.

6. Claim 1 lacks the following features that were included in claim 2 of the application as originally filed:

- (i) The claimed device was originally said to be disposable, which feature is absent from present claim 1. The Board considers this feature to be devoid of any significant technical meaning in the context and is more in the nature of a financial consideration. For example, a reusable device would be made of materials that could be sterilised, but this would still be disposable, so

that this is not a technical limitation.

The claimed device originally used the expression "endoscopic section" whereas "elongate section" is now used instead. However, there is no difference technically between the two expressions, the difference is only that of nomenclature.

7. For the above reasons the Board finds that claim 1 is commensurate with the application as originally filed and the appellant has not improved its position during the course of the examination procedure. The claims are, therefore, allowable under Articles 123(2) and 100(c)EPC.
8. The amendments to claim 1 all have the effect of narrowing the scope of claim 1 as granted. The amplification of clause (c) of claim 1 by the phrase "located between the elongate member and the jaw closing means" is only a clarification of the claim as explained above and does not extend its scope. The claim is satisfactory as regards Article 123(3) EPC, accordingly.
9. *Remittal*

Since the impugned decision was based exclusively on objections under Article 123(2) EPC, which do not apply to the present claims, the Board considers it appropriate to remit the case to the opposition division for further prosecution on the other grounds brought forward by the opponent.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution on the basis of claims 1 to 14 filed as Annex B with the letter of 20 December 2002.

The Registrar:

The Chairman:

V. Commare

W. D. Weiß