BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

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File Number: T 708/91 - 3.2.3

Application No.: 86 300 457.8

Publication No.: 0 190 014

Title of invention: Medical instruments and illuminated attachments

Classification: A61B 1/26, A61B 1/32

D E C I S I O N
of 19 April 1993

Applicant: The Trylon Corporation

Headword:

EPC Article 56

Keyword: "Inventive step (yes)"

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number : T 708/91 - 3.2.3

D E C I S I O N
of the Technical Board of Appeal 3.2.3
of 19 April 1993

Appellant : The Trylon Corporation
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Representative : Thomson, Paul Anthony
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Decision under appeal : **Decision of the Examining Division of the European Patent Office dated 10 April 1991 refusing European patent application No. 86 300 457.8 pursuant to Article 97(1) EPC.**

Composition of the Board :

Chairman : C.T. Wilson
Members : J. du Pouget de Nadaillac
J.H. Van Moer

Summary of Facts and Submissions

I. The appeal is directed against the decision of the Examining Division dated 10 April 1991 refusing the European patent application No. 86 300 457.8 (published under No. 0 190 014) on the grounds that the subject-matter of the claims of the application does not involve an inventive step in view of the following documents:

D1: US-A-4 184 193
D3: US-A-3 716 047.

II. The Appellant (Applicant) lodged the appeal on 6 June 1991, paying simultaneously the appeal fee. On 13 August 1991, he submitted the Statement of Grounds, together with testimonials and evidence of commercial success.

III. Following communications of the Board, the Appellant filed new claims and pages of the description and requested that the impugned decision be set aside and that a patent be granted on the basis of the following documents :

Description: pages 1 to 5, 8, 9, 12, 13 and 16, filed on 26 February 1993;
pages 6, 11 and 15, filed on 11 August 1992;
pages 7, 10 and 14, as originally filed.

Claims: 1, filed on 26 February 1993 and
2 to 9, filed on 11 August 1992.

Drawings: Figures 1 to 25 (Sheets 1/5 to 5/5), as originally filed.

IV. Claim 1 of this request reads:

"An endoscopic device including an examination illuminating light source for illuminating a body cavity, said endoscopic device comprising:

a) an endoscopic body (2,4,6,8; 2,4,40,8; 2,4,60,8; 2,4,94,8) adapted to receive a light source and comprising a plurality of dilator members (4,6; 4,40; 4,60; 4,94), each dilator member extending from a handle or leg portion (2,8);

b) a chemiluminescent light source (26,44,62,90) provided with a light transmitting body (28,46, 64,96) adapted to fit adjacent a contoured surface of said endoscopic body, said endoscopic body comprising attachment means (22,42,72,92) associated either with at least one of said dilator members (6,40,60,94) or with said light source (26,44,62,90) in such a way that said chemiluminescent light source (26,44,62,90) is removably secured to said at least one dilator member (6,40,60,94) such as to direct its light between said dilator members (4,6; 4,40; 4,60; 4,94) in their extended direction."

Claims 2 to 8 are dependent upon Claim 1 and Claim 9 relates to the use of the endoscopic device according to Claims 1 to 8.

Reasons for the Decision

1. The appeal is admissible.

2. The present Claim 1 is mainly supported by Claims 8, 10 and 11 as originally filed, and the removable aspect of the attachment means derives from original Claims 1 and 7. The dependent claims relate to features of dependent claims of the application as originally filed. Since the

subject-matter of Claim 1 is now limited to the combination of a chemiluminescent light with an endoscopic device provided with dilator members, and no longer to the chemiluminescent light itself as originally claimed, the description has been amended to clearly indicate this limitation. The whole set of claims and the description are therefore admissible under Article 123(2) EPC.

3. Among all the cited documents, Document D3 is the only one which describes an endoscopic device provided with both dilator blades and a light source to illuminate the cavity being examined. It concerns a speculum, which comprises:

(a) an endoscopic body having two dilator members,

(b) a handle containing a light source and provided with attachment means for removable attachment to the leg portion of one dilator member, and

(c) a light transmitting body adapted to fit adjacent a contoured and curved surface of said leg portion and directing the light received from the light source between the dilator members in their extended direction.

The light source is not specified in this prior art, which has for its object the provision of a disposable endoscopic device mainly made of inexpensive material like plastic, so that after use the device, more exactly the dilator members part, is thrown away, whereas the handle containing the light source, which is non-disposable, is removed after use and kept for re-use.

4. The present invention differs from this prior art by the use of a chemiluminescent light as light source and by the

particular location of said light, namely on one dilator member. The subject-matter of Claim 1 is, therefore, novel. It still remains to be examined whether the requirement of inventive step is met by this claimed subject-matter.

5. Comparing this subject-matter and the device according to Document D3, the objective problem underlying the present invention can be seen as providing an endoscopic device of the type described above, but which is adapted to satisfactorily illuminate the body cavity being examined, which is more simple in construction, and which does not introduce any electrical current into the body cavity or the surrounding areas to be examined. Moreover, it is an object of the invention to provide an endoscopic device which can be made, although not necessarily, of sterilizable material, which may be sterilised after removal of the illuminating means, without causing problems in the sterilization step. Alternatively, the entire device may be made disposable.

6. To solve these problems, the endoscopic device according to the present invention comprises, as seen above, a chemiluminescent light source, which is kept on a contoured surface of a dilator member of the device by means of the releasable attachment means. A chemi-luminescent light source is a disposable light source, so that, after use, it is easily and quickly removed from the endoscopic device due to the provision of the removable attachment means, and, then, the endoscopic device can be, if necessary, quickly sterilised without difficulty, since it no longer includes a light source. Moreover a chemiluminescent light source does not used electrical current and the risk of electrical shocks is thus avoided. Being located on the dilator member itself, almost nothing obstructs the light rays, which can illuminate a great part of the cavity being examined.

7. The present invention makes a different approach to the problems in comparison with document D3, since there is no need of a disposable endoscopic device, whereas the light source itself is disposal, contrary to the solution of document D3.

8. Before the present invention, chemiluminescent light sources were per se well known. Document D1, for example, describes a lantern comprising a chemiluminescent light-stick held in place by clamping means. This lantern has the size of a torch and can be used for emergency situations, since it produces cold light without the need of an external power source and without the emission of heat, smoke and flames. This document D1, and also others cited in the examining procedure, suggest the use of chemiluminescent lights mainly in emergency situations where no source of electricity is available, for example in a crash landing of an aircraft, a power failure in a submarine or underground installations, and also under water. The lightstick according to document D1 is a cylindrical tube of flexible translucent material, which is about 12 cm long and 1.2 cm in diameter and is divided into two chambers separated by a frangible wall, each containing a chemical component. By breaking the frangible wall, the two components are mixed and react, so that a visible light is provided.

9. Until the present invention, it seems therefore that the prevailing idea was to use these chemiluminescent lights under special circumstances, and not in everyday situations. Moreover, the use of these light sources in the medical field , and more particularly with devices for examining body cavities, cannot be derived from document D1. In accordance with the cited prior art, chemi-luminescent lights were known for more than 16 years before the present invention without, however, being

involved in such a medical use. It is consequently doubtful whether known properties of a chemiluminescent light source, such as the absence of heat or the advantage of unneeded electrical power, even if one of them fulfills an aim of the present invention, could be sufficient, as asserted by the Examining Division, to lead the man skilled in the art to use such a light in an endoscopic device according to document D3. For example, electrical shocks could have been prevented by other means, such as a battery powered light source contained in the housing known from document D3.

10. Because of the location of the light source in a housing attached at the end of a leg portion, so at a distance from the dilator members, the device according to document D3 does not suggest also the particular position of the light source as claimed by the present invention. In the other documents, no suggestion can be found which would result in locating the light source on a contoured surface of a dilator member, increasing thereby the illuminating effect of the light source. This feature results in a much more simple construction of the endoscopic device combined with the light source, since no housing for said source, no curved light bar with light emitting surfaces are necessary, as is the case with the device according to Document D3.

11. For these different reasons, the use of a chemiluminescent light source according to Claim 1 in order to solve the problems underlying the present invention is not obvious. It follows that the subject-matter of Claim 1 involves an inventive step. Claim 1, therefore, complies with the requirements of Article 56 EPC and is admissible. Claims 2 to 8, which concern embodiments of the device, are based on Claim 1 and are valid also. The same applies to Claim 9, which concerns the use of the device according to Claims 1 to 8.

Order

For these reasons, it is decided that:

The case is remitted to the first instance with the order to grant a patent based on the claims, the description and the drawings as specified in III above.

The Registrar: The Chairman:

N. Maslin C.T. Wilson

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