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Datasheet for the decision of 24 October 2025

Case Number: T 0748/23 - 3.2.02

Application Number: 19842436.8

Publication Number: 3893713

IPC: A61B1/00, A61B1/307

Language of the proceedings: EN

Title of invention:
URETEROSCOPE SYSTEM

Applicant:
C. R. Bard, Inc.

Headword:

Relevant legal provisions:
EPC Art. 56, 123(2)

Keyword:
Inventive step - (yes)
Amendments - extension beyond the content of the application as filed (no)

Decisions cited:

Catchword:

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Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0748/23 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 24 October 2025

Appellant: (Applicant)	C. R. Bard, Inc. 730 Central Avenue Murray Hill, NJ 07974 (US)
Representative:	Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 8 December 2022 refusing European patent application No. 19842436.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	M. Alvazzi Delfrate
Members:	S. Böttcher
	Y. Podbielski

Summary of Facts and Submissions

I. The applicant filed an appeal against the decision of the examining division to refuse the application for lack of inventive step of the subject-matter of claim 1.

II. The Board summoned the appellant to oral proceedings and conveyed its preliminary opinion in a communication that claim 1 of the main request was directed to subject-matter involving an inventive step but did not comply with Article 123(2) EPC.

III. On 29 January 2025, the appellant filed a new main request addressing the objection raised.

The appellant requested that the decision under appeal be set aside and that the application be remitted to the Examining Division with the order to grant a patent on the basis of the claims according to the main request and a description to be adapted.

With the same letter, the appellant also filed amended description pages 5 and 12 and drawing sheets 1/8 to 8/8 to be considered by the Examining Division.

IV. The Board cancelled the oral proceedings.

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

"A ureteroscope (100) system, comprising:
a catheter having a distal end (105) in which is at least one light source (111) and an optoelectronic module (109) for imaging the interior of a subject and for outputting a video stream; and

a handpiece (110) including:
a catheter end (114);
a control end (112) opposite to the catheter end;
a central portion (116) positioned between the catheter end and the control end, the central portion having a rounded first surface (126), a rounded second surface (128) opposite to the rounded first surface, and two opposing substantially flat sides (125) between the rounded first surface and the rounded second surface, a longitudinal central plane (132) of the handpiece being positioned between the two opposing substantially flat sides; and
a working channel port (118) disposed on the rounded first surface along the longitudinal central plane proximate to the catheter end and distal to the control end; and
a cable port (120) disposed on the rounded second surface along the longitudinal central plane proximate to the catheter end and distal to the control end; and
a cable (102) connected or connectable to the handpiece at the cable port and configured to provide power to an image sensor in the optoelectronic module and communicate with one or more electronic devices and a communication interface;
the catheter (104) extending from the catheter end of the handpiece, the catheter including an active bend portion and a working channel (107) in fluid communication with the working channel port, the ureteroscope system further comprising one or more controls (122) positioned on the handpiece proximate to the control end,
wherein one or more first controls of the one or more controls is configured to activate and deactivate the at least one light source (111) and one or more second controls of the one or more controls, different from the one or more first controls, is configured to

activate the optoelectronic module, for switching image modes of the optoelectronic module, for activating a frame grabber to create a still image from the video stream output generated by the optoelectronic module; and
wherein the handpiece includes a steering controller (124) configured to control one or more steering wires (158) that are connected to the active bend portion of the catheter to deflect the distal end (105) to the desired location; and
wherein the working channel port (118), the cable port (120), the controls (122) and the steering controller (124) are positioned generally in line with the longitudinal central plane (132) of the handpiece (110) thereby to enable the handpiece (110) to be used by either the right hand or the left hand or switched between hands during use."

VI. The following documents are referred to in this decision.

D1 WO 2017/192351 A1
D2 WO 2016/049490 A1
D9 US 2015/208909 A1

VII. The appellant's arguments relevant to the decision may be summarised as follows.

Main request - inventive step starting from D1

In addition to features
F1: one or more first controls of the one or more controls is configured to activate and deactivate the at least one light source and one or more second controls of the one or more controls, different from the one or more first controls, is configured to

activate the optoelectronic module, for switching image modes of the optoelectronic module, for activating a frame grabber to create a still image from the video stream output generated by the optoelectronic module, and
F2: the controls configured to activate and deactivate the at least one light source are also positioned generally in line with the longitudinal central plane of the handpiece,
mentioned in the decision of the Examining Division, D1 did not disclose the following features:

F-A: It could not be derived directly and unambiguously that the central portion of the handpiece had a rounded second (lower) surface opposite to the rounded first (upper) surface, and these surfaces being connected by flat sides.

F-B: Dl did not disclose the handle 102 as having "one or more controls".

F-C: The port coupling 150 in Dl was on a flat planar surface instead of "on the first rounded surface".

F-D: The connector (130) of D1, which the examining division considered to represent the cable port, was not arranged on the rounded second surface since the handpiece of D1 did not have a rounded second surface. Furthermore, the connector (130) could not be regarded to be positioned generally in line with the longitudinal central plane of the handpiece.

Figure 1 of D9 depicted a star-shaped knob and at least three buttons. The three buttons could be considered as possible "controls" within the meaning of claim 1. However, the three buttons were a) not aligned with one

another (see Figure 1), and therefore could not all be aligned with a "longitudinal central plane", and b) not aligned along a longitudinal central plane with the star-shaped knob which corresponded to the "steering controller" of claim 1 and to the "actuator 120" of D1.

Thus, neither document Dl nor D9 taught the lateral alignment of all of: the working channel port (118), the cable port (120), the controls (122) and the steering controller (124) along the longitudinal central plane of the hand piece.

The Examining Division implicitly formulated a problem of "how to provide control of light sources and imaging from the handle of the ureteroscope", which contained direct pointers at novel features F1 and F-B.

An objective technical problem, starting from Dl, that did not provide unallowable pointers to the solution, was: "to provide a ureteroscope that offers its operator improved ergonomics and enhanced manoeuvrability" (paragraph [0020] of the application).

The novel features of claim 1 solved this problem and provided a device where the user could steer the ureteroscope and control the optics (both the light control and screen grabbing) all with one hand (and this could be either hand).

None of the cited prior art, alone or in combination, would lead the skilled person to the present invention. Thus, the subject-matter of claim 1 was inventive over the cited prior art.

Main request - inventive step starting from D2

In addition to features
F3: said at least one of the one or more controls configured to activate and deactivate the at least one light source is positioned on the handpiece proximate to the control end;
F4: said one or more controls are configured to activate the optoelectronic module, and for switching image modes of the optoelectronic module, for activating a frame grabber to create a still image from the video stream output generated by the optoelectronic module;
F5: the steering controller is positioned generally in line with the longitudinal central plane of the handpiece thereby to enable the handpiece to be used by either the right hand or the left hand or switched between hands during use,
mentioned in the decision of the Examining Division, D2 did not disclose the following features:

F-E: D2 did not disclose that the control configured to activate and deactivate the light source was positioned in line with the longitudinal central plane of the handpiece,

F-F: The port 112,114 (Figure 1) was not in line with the controls 118, 120, 136 and the longitudinal central plane.

F-G: The central portion of the handpiece did not have two opposing flat sides between a rounded first surface and a rounded second surface.

The distinguishing features did not solve two partial problems. The objective technical problem rather was to provide a ureteroscope that offered its operator improved ergonomics and enhanced manoeuvrability.

This problem was solved by providing both the working port and the control port aligned with one another along a longitudinal central plane and aligning these ports with both the steering controller and the controls that control the light-source and the optoelectronic module.

As none of D1 and D9 disclosed or suggested to position all these controls and ports in line with a longitudinal plane of the handpiece, the combination of D2 with Dl and D9 could not lead the person skilled in the art to the subject-matter of the claim. Thus, the subject-matter of claim 1 was also inventive over the combination of D2 with D1 and D9.

Reasons for the Decision

1. Subject-matter of the application

The application relates to an ureteroscope comprising a catheter and a handpiece. The handpiece has a central portion between a catheter end and a control end. The central portion has two rounded surfaces (126, 128) and two opposing flat sides (124) between these rounded surfaces (Figures 4 and 5). The handpiece further comprises a working channel port (118), a cable port (120), a cable (102), one or more controls (122) for controlling a light source and an optoelectronic module in the catheter, and a steering controller (also indicated with reference 124) for controlling steering wires to deflect the distal end of the catheter. The working channel port (118), the cable port (120), the controls (122) and the steering controller (124) are

arranged in line with a longitudinal central plane, positioned between the two opposing side surfaces of the handpiece (Figures 4 to 6). This arrangement enables the handpiece to be used by either the right hand or the left hand.

2. Main request - added subject-matter

Claim 1 of the main request is based on claims 11 and 12 as originally filed and includes the additional feature "one or more first controls of the one or more controls is configured to activate and deactivate the at least one light source and one or more second controls of the one or more controls, different from the one or more first controls is configured to activate the optoelectronic module...". The additional feature finds support in claim 13 as originally filed and paragraph [0021] of the description as originally filed.

Claim 1 therefore meets the requirements of Article 123(2) EPC.

3. Main request - inventive step starting from D1

3.1 In the appealed decision, the Examining Division held that the subject-matter of claim 1 of the then main request lacked an inventive step in view of D1 in combination with D9 (point 1.1 of the decision).

In their view, the subject-matter of claim 1 differed from the disclosure of D1 only in features F1 and F2 (page 6 of the decision, passages starting in the middle of the page).

3.2 The Board does not share this view. Rather, as correctly argued by the appellant, there are more distinguishing features referred to as follows:

F-A: It cannot be derived directly and unambiguously, that the central portion of the handpiece has a rounded second (lower) surface opposite to the rounded first (upper) surface. However, contrary to the appellant's view, the sides of the handpiece can be regarded as substantially flat (Figure 3).

F-B: Contrary to the Examining Division's view, D1 does not disclose one or more controls in addition to and separately from the steering controller (120) (paragraph [0024]).

F-C: The port coupling (150) of D1, which the Examining Division considered to represent the working channel port, is not arranged on the first rounded surface.

F-D: The connector (130) of D1, which the Examining Division considered to represent the cable port, is not arranged on the rounded second surface since the handpiece of D1 does not have a rounded second surface. However, the connector (130) can be regarded to be positioned generally in line with the longitudinal central plane of the handpiece.

3.3 Thus, the Examining Division's reasoning is based on an incorrect evaluation of the distinguishing features and cannot be followed.

3.4 D9 discloses an endoscope comprising multiple controls arranged on a handle (Figure 1). However, as correctly pointed out by the appellant, the star-shaped knob and the buttons 105 are not aligned along a longitudinal

central plane. Hence, neither D1 nor D9 teaches or suggests the lateral alignment of all of: the working channel port (118), the cable port (120), the controls (122) and the steering controller (124) along the longitudinal central plane of the hand piece. The combination of D1 and D9 does not result in a ureteroscope according to claim 1.

3.5 As correctly stated by the appellant, the objective technical problem as defined by the Examining Division ("how to provide control of light sources and imaging from the handle of the ureteroscope") contains pointers to the solution. The objective technical problem correctly defined by the appellant ("to provide a ureteroscope that offers its operator improved ergonomics and enhanced manoeuvrability") is solved in a non-obvious way by the distinguishing features of claim 1.

3.6 Hence, the subject-matter of claim 1 involves an inventive step over the combination of D1 and D9.

4. Main request - inventive step starting from D2

4.1 The Examining Division also considered the subject-matter of claim 1 to lack an inventive step over D2 combined with Dl and D9. This attack relied on the "partial problems" approach to inventive step.

In the Examining Division's view, the subject-matter of claim 1 differed from the disclosure of D2 in features F3, F4 and F5 (page 11 of the decision, third to sixth paragraph).

4.2 As correctly argued by the appellant, D2 does additionally not disclose that the control configured to activate and deactivate the light source is positioned in line with the longitudinal central plane of the handpiece. Paragraph [0044] of D2 mentions that the actuator for controlling operation of LED 62 is not shown in the Figures. Hence, the position of this actuator is not known. The actuator 136 referred to by the Examining Division (shown in Figure 1) does not control the LED but the pressurizer 132 (paragraph [0052]).

The appellant was also correct in stating that the port 112,114 (Figure 1) is not disclosed in line with the controls 118, 120, 136 and the longitudinal central plane, and that the central portion of the handpiece does not have two opposing flat sides between a rounded first surface and a rounded second surface.

4.3 The distinguishing features do not solve two partial problems but rather cooperate in solving the objective technical problem of providing a ureteroscope that offers its operator improved ergonomics and enhanced manoeuvrability.

This problem is solved by providing both the working port and the control port aligned with one another along a longitudinal central plane and further aligning these ports with both the steering controller and the controls that control the light-source and the optoelectronic module.

As none of D1 and D9 discloses or suggests to position all these controls and ports in line with a longitudinal plane of the handpiece (see point 3.4

above), the combination of D2 with Dl and D9 cannot lead the skilled person to the subject-matter of the claim.

4.4 Thus, the subject-matter of claim 1 is also inventive over the combination of D2 with D1 and D9.

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 with the order to grant a patent on the basis of the main request (claims 1 to 6 filed with letter dated 29 January 2025) and a description to be adapted thereto.

The Registrar: The Chairman:

G. Magouliotis M. Alvazzi Delfrate

Decision electronically authenticated