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# Datasheet for the decision of 29 November 2018

Case Number: T 0434/14 - 3.2.02

Application Number: 06001311.7

Publication Number: 1683472

IPC: A61B1/05, A61B1/005, G02B23/24

Language of the proceedings: ΕN

#### Title of invention:

Variable direction of view instrument with distal image sensor

#### Patent Proprietor:

Karl Storz Imaging, Inc.

#### Opponent:

OLYMPUS WINTER & IBE GMBH

#### Headword:

#### Relevant legal provisions:

EPC Art. 123(2), 84, 54, 56, 111(1)

## Keyword:

Added subject-matter - auxiliary request IV (no)
Clarity - auxiliary request IV (yes)
Novelty - auxiliary request IV (yes)
Inventive step - main request and auxiliary request II (no) - auxiliary request IV (yes)

## Decisions cited:

G 0003/14

#### Catchword:



# Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 0434/14 - 3.2.02

D E C I S I O N

of Technical Board of Appeal 3.2.02

of 29 November 2018

Appellant: Karl Storz Imaging, Inc.
(Patent Proprietor)

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 13 December 2013 revoking European patent No. 1683472

pursuant to Article 101(3)(b) EPC.

#### Composition of the Board:

D. Ceccarelli

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# Summary of Facts and Submissions

- The patent proprietor lodged an appeal against the decision of the Opposition Division dispatched on 13 December 2013 revoking European patent No. 1683472.
- II. The following documents are relevant for the present decision:

D4: US-A-4 573 450

D5: DE-A-35 29 026

D6: US-A-2003/0092966

D9: US-B-6 371 909

D10: DE-A-34 26 429.

- III. Notice of appeal was filed on 19 February 2014, and the fee for appeal was paid the same day. A statement setting out the grounds of appeal was received on 23 April 2014.
- IV. Oral proceedings were held on 29 November 2018.

The appellant (patent proprietor) requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request or, in the alternative, of one of the auxiliary requests II and IV to VII, all filed with letter dated 23 April 2014. Auxiliary requests I and III, filed with letter dated 23 April 2014, were withdrawn.

The respondent (opponent) requested that the appeal be dismissed.

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- V. Claim 1 of the main request reads as follows:
  - "1. A viewing instrument having a variable direction of view, comprising:
  - a shaft (10) having a distal end (44) and a longitudinal axis (22); and
  - a reflecting element (32) located at the distal end (44) of said shaft (10), wherein said element (32) rotates about a rotational axis (26) substantially perpendicular to the longitudinal axis (22) of said shaft (10);

characterized by

- a sensor (46) mounted in the distal end (44) of said shaft (10), which sensor (46) is stationary with respect to said shaft (10), said sensor (46) having an image plane substantially parallel to the longitudinal axis of said shaft (10), wherein the reflecting element (32) receives incoming light and redirects the light onto the image plane (45) of said sensor (46)."
- VI. Claim 1 of the auxiliary request II reads as claim 1 of the main request, adding at the end the feature:
  - " $(\ldots)$ , and wherein the reflective element (32) includes an aperture stop (54)."
- VII. Claim 1 of the auxiliary request IV reads as claim 1 of the main request, adding at the end the feature:
  - "(...); a negative lens (52) located adjacent said reflecting element (32) through which the incoming light is transmitted to said reflecting element (32); and a convex surface (56) through which the redirected light is transmitted from said reflecting element (32) onto the image plane (45) of said sensor (46), and

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wherein the reflective element (32) includes an aperture stop (54)."

VIII. The arguments of the appellant which are relevant for the present decision may be summarised as follows:

Main request - Article 56 EPC

Document D5 did not qualify as the closest prior art. According to the criteria developed by the Boards of Appeal for selecting the closest prior art, the first consideration was that it must be directed to the same purpose or effect as the invention. The subject-matter of claim 1 and D5 only had in common that they related to endoscopes in general. D5 did not address a variable direction of view. Moreover, the skilled person would not have been motivated to include the rotatable prism 32 of D9 into an optical system according to D5 because D5 did not address the technical problem of how to provide an endoscope with a variable direction of view. The optical systems disclosed in D5 were not at all suitable for a variable direction of view. If prism 15 of Fig. 1A or 17 of D5 was to be rotated to provide a variable direction of view, the objective lens 12 needed to be rotated too. Since the length of the objective lens 12 was greater than the diameter of the shaft 11, there was no useful pivoting range left which did not increase the diameter of the endoscope. Moreover, incorporating the objective lens assembly of Figure 17 of D5 on rotating prism 15 would also increase the diameter of the distal end of the endoscope, which D5 instructed to keep as small as possible (second paragraph on page 4 and page 6). Hence, from the combination of D5 with D9, the skilled person would not have arrived at the claimed invention.

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Auxiliary request II - Article 56 EPC

The additional feature according to which the reflective element included an aperture stop was not known from D5 or D9. In Figure 17 of D5 it was not clear where an aperture stop, if any, should be positioned. From Figure 5C of the patent it was clear that the aperture stop on the reflecting element 32 limited the amount of stray radiation entering the positive lens 58 and sensor 46.

Auxiliary request IV

Concerning this request, the arguments that are relevant for the present decision are essentially those on which the reasons set out below are based.

IX. The arguments of the respondent which are relevant for the present decision may be summarised as follows:

Main request and auxiliary request II

The case should be remitted to the Opposition Division since the subject-matter of auxiliary request II had not been decided upon.

Concerning the objections raised against the substance of these requests, the arguments that are relevant for the present decision are essentially those on which the reasons set out below are based.

Auxiliary request IV

A previously raised objection against admitting auxiliary request IV was withdrawn during the oral proceedings.

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#### - Articles 123(2) and 84 EPC

There was no disclosure in the original application for the claimed feature that the "sensor is stationary with respect to said shaft". Paragraph [0036] merely described that the imager remained stationary, without indicating with respect to which feature of the endoscope it did so. This aspect was also unclear within the meaning of Article 84 EPC. Moreover, paragraph [0036] referred directly to the embodiments of Figures 5A and 6, which means that their features (such as the glass dome and the mounting of the sensor to the distal portion 44 as mentioned in column 6, lines 11 to 13; or the axis normal to the sensor surface coinciding with the rotational axis of the reflecting element) should have been included in the claim as well. Furthermore, paragraph [0035] defined the sensor as being side-mounted, which was also omitted from claim 1. Therefore, the subject-matter of claim 1 was an unallowable intermediate generalisation, contrary to Article 123(2) EPC.

#### - Novelty

Document D4 anticipated the claimed subject-matter. It disclosed a rotatable prism (9) mounted on a frame (13) (column 3, lines 45 to 48). The inwardly pointing structure of the frame shown in Figures 2 and 3 constituted an aperture stop as claimed.

#### - Inventive step

The features added to claim 1 of auxiliary request IV did not involve an inventive step. In Figure 17 of D5, convergent lenses with a convex surface were placed

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behind the reflecting element 15. Moreover, in front of the reflecting element, there was an aperture stop which the skilled person would have readily considered making part of the reflecting element, as was explained for claim 1 of auxiliary request II. The objective lenses placed in front of reflecting element 15 included, moreover, a negative lens. Even if the latter was separated from the reflecting element by a further lens, it was close to the reflecting element, and hence "adjacent" to it, as claimed. Since D9 taught the skilled person to attach a negative lens onto the rotating prism (Figures 6 and 7), the skilled person would also have done so for the corresponding elements of Figure 17 of D5. Hence, the combination of D5 and D9 rendered the subject-matter of claim 1 obvious.

Starting from D6 as the closest prior art, the subjectmatter of claim 1 differed in that the sensor was mounted in the distal end of the endoscope shaft with an image plane substantially parallel to the longitudinal axis of the shaft and in that the reflecting element included an aperture stop. These measures led to an endoscope with smaller dimensions without relay lenses which degraded the image quality. D10 disclosed an endoscope with a distal sensor with an image plane parallel to the longitudinal axis, thereby avoiding the use of relay lenses. The skilled person would have therefore consulted D10 to obtain an endoscope with a reduced diameter and good optical quality. Furthermore, a negative lens adjacent the reflecting element was known from D6 (Figure 2B), and an aperture stop disclosed in D10 (Figure 2). It was a mere design option to include this aperture stop on the reflecting element. Hence, the combination of D6 and D10 also rendered the subject-matter of claim 1 obvious.

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#### Reasons for the Decision

- 1. The appeal is admissible.
- 2. The invention

The invention concerns an endoscope with a variable direction of view and an imaging sensor placed at the distal end of the endoscope. The variable direction of view is obtained by means of a reflecting element located at the distal end of the endoscope which rotates about a rotational axis substantially perpendicular to the longitudinal axis of the endoscope shaft (paragraph [0001] of the patent). The placement of the imaging sensor at the distal end of the endoscope eliminates the need for a relay lens assembly relaying the image to the proximal end of the endoscope to the user's eye or a camera which causes image degradation (paragraphs [0005], [0019] and [0020] of the patent).

- 3. Main request Inventive step
- 3.1 The respondent presented two lines of argument disputing the inventiveness of the subject-matter of claim 1 which departed, respectively, from documents D5 and D6 as the closest prior art. The Board decided to first consider D5 as the starting point.
- 3.2 Document D5 discloses various endoscopes with a stationary sensor (camera 13) mounted in the distal end of the endoscope shaft having an image plane substantially parallel to the longitudinal axis of the shaft (page 5, last paragraph; Figures 1A and 1B) and a reflecting element (15) located at the distal end of

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the shaft which receives incoming light and redirects the light onto the image plane of the sensor (13) (page 6, first paragraph). D5 explains that by placing the sensor at the distal end of the endoscope with its image plane parallel to its longitudinal axis, the diameter of the distal diameter of the endoscope can be reduced (page 4, second paragraph). Some of the embodiments described represent forward-viewing endoscopes (Figures 1A, 2 to 11 and 17), while other embodiments represent side-viewing endoscopes (Figures 12 to 14). However, all these endoscopes view in a single fixed direction.

3.3 The appellant argued that D5 did not qualify as the closest prior art. The appellant considered that when selecting the closest prior art in accordance with the criteria developed by the Boards of Appeal, the first consideration was that it must be directed to the same purpose or effect as the invention. The subject-matter of claim 1 and D5 only had in common that they related to endoscopes in general. D5 did not address a variable direction of view.

The boards have established that the starting point for the assessment of inventive step should be one which is at least "promising", in the sense that there is some probability of a skilled person arriving at the claimed invention (as cited in Case Law of the Boards of Appeal, 8th edition 2016, I.D.3.4.1). The closest prior art should relate to a similar purpose or objective as the claimed invention (it does not necessarily need to be the "same" purpose, as the appellant held). In the present case, D5 indeed addresses purposes similar to those mentioned in the impugned patent, such as keeping the endoscope diameter small by placing the sensor longitudinally at the endoscope's distal end (page 3,

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paragraph 3 of D5; paragraph [0011] of the patent). It cannot be argued that because D5 lacks one of the claimed features - the rotating reflecting element to provide a variable direction of view - an inventive-step attack starting from this document should be dismissed. In fact, as shown below, when applying the problem-solution approach departing from D5, the skilled person would arrive, after consideration of D9, at the claimed subject-matter without exercise of inventiveness. This corroborates that D5 is indeed a promising springboard, contrary to the appellant's view.

- 3.4 The subject-matter of claim 1 differs from any of the embodiments of D5 in that the reflecting element rotates about a rotational axis substantially perpendicular to the longitudinal axis of the shaft. In addition, claim 1 explicitly specifies what constitutes the objective technical problem associated with the distinguishing feature of a rotating reflector, i.e. to achieve a variable direction of view. The objective technical problem is thus derived, as prescribed in the problem-solution approach, merely on the basis of the differentiating feature and its technical effect. There is no need for the closest prior art D5 itself to identify this problem, as argued by the appellant. Moreover, the objective technical problem may well be different from any subjective problem which the inventor set out to solve.
- 3.5 Precisely the problem of achieving a variable direction of view for an endoscope is addressed in D9 (column 1, lines 42 to 50), where it is explained that most current endoscopes provide a limited and fixed view, so that the entire endoscope needs to be repositioned or replaced in order to change the endoscopic view within

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the inspected cavity. As a solution to such undesirable manipulations and replacements, D9 proposes to devise the endoscope with a reflecting element (32 in Figures 3, 6 and 7; column 4, lines 1 to 7) which rotates about a rotational axis substantially perpendicular to the longitudinal axis of the shaft (column 2, lines 21 to 34). The light is then transmitted through a rod lens (40) to a CCD camera (38) positioned in the proximal end portion of the endoscope (column 4, lines 15 to 21) having an image plane oriented perpendicular to the longitudinal axis of the endoscope (Figure 3).

3.6 When seeking to solve the aforementioned problem the skilled person would readily incorporate the solution of a rotatable reflecting element disclosed in D9 into the endoscopes according to D5, in particular that of Figure 17. Consequently, the skilled person would devise the reflecting element 15 of Figure 17 of D5 as rotatable about a rotational axis perpendicular to the longitudinal axis of the shaft. As a consequence, the skilled person would need to adapt the depicted objective lens assembly placed in front of the reflecting element 15 so it also rotates, particularly keeping the requirement to not unduly increase the diameter of the endoscope mentioned in D5, page 4, second paragraph and page 6, second paragraph. For the skilled person, such an adaptation is straightforward, especially in view of D9 disclosing that the objective lens (negative lens objective 90 in Figure 7, or 85 in Figure 6) is placed against or attached to the rotating reflecting element (32).

Hence, the skilled person would have readily arrived at the claimed subject-matter.

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- 3.7 The Board consequently concludes that the subjectmatter of claim 1 of the main request does not fulfil the requirement of an inventive step within the meaning of Article 56 EPC.
- 4. Auxiliary request II

#### 4.1 Remittal

The respondent had requested to remit the case to the Opposition Division since the subject-matter of auxiliary request II had not been decided upon.

It is established case law of the Boards of Appeal that there is no absolute right of a party to have every aspect of a case examined in two instances (decisions cited in Case Law of the Boards of Appeal, 8th edition 2016, IV.E.7.6.1). Other criteria, e.g. the general interest that proceedings are brought to a close within an appropriate period of time, have also to be taken into account by the Board when deciding whether or not to remit a case. A possible consequence of remitting the present case to the Opposition Division could be further subsequent appeal proceedings, which would unduly lengthen the proceedings. Thus, with due consideration of procedural economy and to avoid further delays, the Board decides not to remit the case but to decide on it itself in accordance with Article 111(1) EPC.

# 4.2 Inventive step

4.2.1 With respect to claim 1 of the main request, the subject-matter of claim 1 of auxiliary request II is further limited by the definition that "the reflective element includes an aperture stop".

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- 4.2.2 In Figure 17 of D5, the objective lens assembly placed before the reflecting element 15 is depicted as including, inter alia, an aperture stop, denoted by two arrows placed around and pointing towards the optical axis immediately before the reflecting element. The drawing does not allow to directly and unambiguously infer, however, that the aperture stop should be included in the reflective element, as defined in claim 1.
- 4.2.3 Even in the absence of any mention of an aperture stop in the description of D5, the skilled person knows that the depicted aperture stop provides a limitation of the amount of light which passes through the optical system. The skilled person knows as well that it is merely a design option where such an aperture stop should be placed along the optical system. Moreover, as indicated under point 3.6 above, the skilled person would readily place the objective lens assembly against or attached to the reflecting element 15 of Figure 17 of D5 and rotating about a transversal axis. In this constellation, it would be an obvious design option to fix the aperture stop on the reflecting element. Thereby, "the reflective element includes an aperture stop", as defined in claim 1.

It is noted that the patent also shows the aperture stop 54 at different locations along the optical system without providing any indication of purpose or effect for any of these locations. For example, in Figures 5B, 5C, 5G and 5H, the aperture stop 54 is shown to be on the reflecting element 32 (column 7, lines 14 to 18), in Figure 5E the aperture stop 54 is depicted on lens 61 after the reflecting element, and in Figure 5F the aperture stop is placed between the reflecting

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element and a subsequent lens element. The appellant was also unable to explain at the oral proceedings any purpose or effect for placing the aperture stop at any of these locations, in particular on the reflecting element according to the claim.

The Board consequently concludes that devising the aperture stop to be included on the reflective element, as defined in claim 1, is an obvious selection among a number of known possibilities.

- 4.2.4 Consequently, the subject-matter of claim 1 of auxiliary request II does not fulfil the requirement of an inventive step within the meaning of Article 56 EPC.
- 5. Auxiliary request IV
- 5.1 Articles 123(2) and 84 EPC
- 5.1.1 Claim 1 of auxiliary request IV is based on claims 1, 3 and 13 and column 6, lines 13 to 17 and 28 to 31 of the published version EP-A-1 683 472 of the application as originally filed. These passages of the original description provide a direct and unambiguous disclosure of the claimed feature that the "sensor is stationary with respect to said shaft". In fact, column 6, lines 13 to 17 of the published version discloses that the sensor 46 is mounted on the distal portion 44 of the endoscope shaft 10, and column 6, lines 28 to 31 discloses that the sensor "remains stationary" avoiding problems associated with flexing and/or rotating electrical connections. Although it is not explicitly said with respect to which element of the endoscope the sensor should "remain stationary" to avoid flexing and/ or rotating electrical connections, the skilled person is left in no doubt that the disclosed requirement can

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only be fulfilled by a sensor remaining stationary with respect "to said shaft", as claimed. The respondent did not actually indicate any other element with respect to which the skilled person could consider that the sensor should remain stationary to avoid problems associated with flexing and/or rotating electrical connections.

5.1.2 The respondent objected, moreover, that the aforementioned passages of the description of the original application described further features of the endoscope (such as the glass dome and the mounting of the sensor to the distal portion 44 as mentioned in column 6, lines 11 to 13; or the axis normal to the sensor surface coinciding with the rotational axis of the reflecting element) which concerned the reflecting element 32 and the objective-sensor assembly as shown as an example in Figures 5A and 6 respectively. However, these features had been omitted from claim 1, leading to an intermediate generalisation.

The Board, however, does not find that the aforementioned features are inextricably linked with the stationary condition of the sensor. All the more so since the references to Figures 5A and 6 are explicitly stated to be mere "examples" (paragraph [0036]). The respondent's conclusion that omitting these further features from the definition of claim 1 led to an unallowable intermediate generalisation is hence unfounded.

5.1.3 The respondent objected, moreover, that the definition of the sensor as "mounted in the distal end of the shaft" was a generalisation of the "side-mounted" sensor disclosed in column 6, lines 13 to 17 of the original application (in its printed version). The Board finds this objection to be unfounded as well

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since the present definition corresponds verbatim to the one provided in original claim 1. Moreover, the feature "side-mounted" is preceded by "i.e.", which clearly indicates that the side-mounted aspect results from the features preceding it, which are also all contained in claim 1.

- 5.1.4 The Board therefore concludes that the definition of claim 1 satisfies the requirements of Article 123(2) EPC.
- 5.1.5 The claimed definition of the sensor being stationary with respect to the shaft was objected to, moreover, as being unclear. However, the Board was unable to comprehend any reason for raising this objection. As the appellant correctly argued, the sensor is clearly claimed as lacking movement with respect to the shaft.

All the remaining features of claim 1 are contained in claims 1, 3 and 13 of the patent as granted, and, as a result, are not open to clarity objections in opposition-appeal proceedings, in accordance with G 3/14.

- 5.1.6 Hence, claim 1 is considered to fulfil the requirements of Article 84 EPC as well.
- 5.2 Novelty
- 5.2.1 Document D4 discloses an endoscope comprising a reflecting element (prism 9) and a sensor (10) mounted at the distal end of the endoscope shaft (Figures 2 and 3; column 3, lines 24 to 30). D4 contains no disclosure of an aperture stop, much less of one included in the reflecting element (9). Although prism 9 is disclosed as being mounted on frame 13 (column 3, lines 45 to

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- 48), the respondent's argument that the frame, in particular its inwardly pointing structure schematically shown in Figures 2 and 3, constituted an aperture stop is not accepted by the Board. Indeed, there is no direct and unambiguous disclosure in D4 on how the objective lens system which is placed in front of prism 9 in Figures 2 and 3 directs or focuses light, particularly regarding mounting frame 13. It is conceivable that no portion of the light bundle has any interaction with the mounting frame.
- 5.2.2 Furthermore, the reflecting element (prism 9) and the sensor (10) are mounted on a portion of the endoscope which can be curved by means of annular ring members (17) which rotate around different transversal directions (column 3, lines 51 to 54; Figure 2). Since prism 9 and sensor 10 are placed in abutting relationship (Figures 2 to 4), if the prism is considered rotatable, the sensor would also be rotatable (and thus not stationary with respect to the shaft as claimed); and if the sensor is considered stationary with respect to the shaft, the prism would be stationary too (and thus not rotatable as claimed).
- 5.2.3 Thus, claim 1 of auxiliary request IV satisfies the requirement of novelty within the meaning of Article 54 EPC.
- 5.3 Inventive step
- 5.3.1 With respect to claim 1 of auxiliary request II, the subject-matter of claim 1 of auxiliary request IV is further limited by "a negative lens (52) located adjacent said reflecting element (32) through which the incoming light is transmitted to said reflecting element (32); and a convex surface (56) through which

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the redirected light is transmitted from said reflecting element (32) onto the image plane (45) of said sensor (46)".

- The endoscope of Figure 17 of D5 is depicted as 5.3.2 comprising convergent lenses behind the reflecting element 15, thus comprising "a convex surface through which the redirected light is transmitted from said reflecting element (15) onto the image plane of said sensor (13)", as defined in claim 1. Moreover, the objective lens assembly before the reflecting element 15 comprises, in this order, a negative lens, a convergent lens and the aperture stop mentioned under point 4.2.2 above. The negative lens is therefore spaced away from the reflecting element by the convergent lens, and thus the negative lens is not "adjacent said reflecting element", as defined in claim 1. Contrary to the respondent's view, the Board considers that since the negative lens and the reflecting element are physically separated by another lens placed in between, they may be said to be close by or in the vicinity of each other. The property of being "adjacent" to each other, as claimed, precludes, however, in the Board's view, the existence of an element which physically separates them.
- 5.3.3 As indicated above, in D9, a negative lens
  (element 90 in Figure 7 or 85 in Figure 6) is placed
  against or attached to the rotating reflecting
  element (32), and thus the negative lens is adjacent to
  the reflecting element. However, for the endoscopes of
  Figures 6 and 7 of D9, no aperture stop is disclosed.
  It would hence be with hindsight that the skilled
  person would retain the aperture stop of Figure 17 of
  D5 while at the same time replacing the other two
  elements of the objective lens assembly of Figure 17 of

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D5 with the negative lens adjoined to the reflecting element of D9. As a consequence, the Board was not convinced that the combination of documents D5 and D9 would readily lead the skilled person to an endoscope with a negative lens adjacent a reflecting element rotating around a transverse axis and including an aperture stop.

- 5.3.4 Therefore, the subject-matter of claim 1 is not rendered obvious by the combination of documents D5 and D9.
- 5.3.5 In a further line of attack, the respondent departed from document D6 as the closest prior art. This document discloses an endoscope having a reflecting element (10) located at the distal end of the endoscope shaft which rotates about a rotational axis substantially perpendicular to the longitudinal axis of the shaft, with a negative lens (46) located adjacent said reflecting element (10), from where the image is relayed via an optical train (16) formed by a series of lenses with convex surfaces to a camera at the proximal end of the endoscope (paragraphs [0026] and [0028]; Figure 2B).
- 5.3.6 Hence, the subject-matter of claim 1 differs from D6 in that the sensor is mounted in the distal end of the endoscope shaft with an image plane substantially parallel to the longitudinal axis of the shaft and in that the reflective element includes an aperture stop.
- 5.3.7 The technical effect of placing the sensor at the distal end of the endoscope is to avoid the lengthy optical train of lenses used in D6. Accordingly, the objective technical problem is to improve the quality of the image. The Board notes that the problem

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formulated by the respondent to reduce the dimensions of the endoscope does not result in any way from the differentiating features and is consequently to be disregarded.

D10 concerns an endoscope with a sensor mounted in the 5.3.8 distal end of the shaft with an image plane substantially parallel to the longitudinal axis of the shaft. However, the differentiating feature of a distal sensor placed parallel to the shaft axis is provided in D10 to solve a problem different to the objective technical problem formulated above (to improve image quality). D10 departs from the prior art shown in Figure 1 in which a sensor is mounted at the distal end of the endoscope, but in a transverse direction. D10 proposes placing the sensor (1) parallel to the longitudinal direction (exclusively) to reduce the dimensions of the endoscope (page 4, lines 9 to 13; page 5, first and third paragraphs). The parallel placement of the sensor has, obviously, no influence on the quality of the image.

The skilled person would therefore not resort to D10 to solve the posed problem of improving the quality of the image.

- 5.3.9 Also missing in D6 is any disclosure of an aperture stop, a fortiori, one included in the reflecting element (46). Although D10 depicts an aperture stop (S) in Figure 2, the same is not included in the prism (2), but in a position removed from the latter, between lenses LA and LB.
- 5.3.10 The Board, therefore, does not share the respondent's view that the skilled person would be readily led to

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the claimed subject-matter from a combination of documents  ${\tt D6}$  and  ${\tt D10}$ .

5.3.11 As a consequence, also the objections under Article 56 EPC are not prejudicial to maintaining the patent on the basis of auxiliary request IV.

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#### Order

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

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the department of first instance, with the order to maintain the patent on the basis of:
  - claims 1 to 22 of auxiliary request IV filed with letter dated 23 April 2014;
  - description: columns 1 and 2 of the patent as granted and columns 3 to 8 as filed during the oral proceedings;
  - figures 1 to 8 of the patent as granted.

The Registrar:

The Chairman:



D. Hampe E. Dufrasne

Decision electronically authenticated