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**Datasheet for the decision  
of 10 March 2020**

**Case Number:** T 0954/17 - 3.4.02

**Application Number:** 10162321.3

**Publication Number:** 2251680

**IPC:** G01N23/083

**Language of the proceedings:** EN

**Title of invention:**

X-ray inspection device

**Patent Proprietor:**

Ishida Co., Ltd.

**Opponent:**

WIPOTEC GmbH

**Headword:**

**Relevant legal provisions:**

RPBA Art. 12(4), 13

RPBA 2020 Art. 13(1)

EPC Art. 54, 56, 123(2)

**Keyword:**

Late-filed request - submitted with the statement of grounds of appeal - admitted (yes)

Late-filed objection - admitted (yes)

Amendments - added subject-matter (no)

Late-filed evidence - submitted during oral proceedings - admitted (no)

Novelty - after amendment - (yes)

Inventive step - after amendment - (yes)

**Decisions cited:**

T 0032/16, T 0634/16

**Catchword:**

At the third level of the convergent approach applicable in appeal proceedings in accordance with the revised version of the Rules of Procedure of the Boards of Appeal (RPBA 2020), the boards of appeal are free to use or not use the criteria set out in Article 13(1) RPBA 2020 when deciding, in the exercise of their discretion in accordance with Article 13(2) RPBA 2020, whether to admit an amendment made at this stage of the proceedings. This also holds true when Article 13 RPBA 2007, rather than Article 13(2) RPBA 2020, is to be applied. (See points 3.7 to 3.11 of the Reasons)



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Case Number: T 0954/17 - 3.4.02

**D E C I S I O N**  
**of Technical Board of Appeal 3.4.02**  
**of 10 March 2020**

**Appellant:** Ishida Co., Ltd.  
(Patent Proprietor) 44 Sanno-cho  
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**Appellant:** WIPOTEC GmbH  
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**Representative:** Mischung, Ralf  
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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
15 February 2017 concerning maintenance of the  
European Patent No. 2251680 in amended form.**

**Composition of the Board:**

**Chairwoman** T. Karamanli  
**Members:** C. Kallinger  
F. J. Narganes-Quijano

## **Summary of Facts and Submissions**

- I. The opponent lodged an appeal against the opposition division's interlocutory decision to maintain the European patent No. 2 251 680 in amended form and requested that the decision be set aside and that the patent be revoked in its entirety.
  
- II. The patent proprietor also lodged an appeal against the opposition division's interlocutory decision and requested that the decision under appeal be set aside and that the patent be maintained as granted (main request). As an auxiliary measure, it requested that the decision under appeal be set aside and that the patent be maintained as amended on the basis of the claims according to one of the first to eighth auxiliary requests filed by letter dated 7 December 2016 or according to the ninth auxiliary request filed with the statement setting out the grounds of appeal dated 23 June 2017.
  
- III. The board issued a summons to oral proceedings dated 10 September 2019. In a communication dated 10 December 2019 pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal in the version of 2007 (RPBA 2007 - see OJ EPO 2007, 536 and EPC, 16th edition, June 2016, pages 601 to 629), the board gave its preliminary opinion on all relevant issues.
  
- IV. In its reply to the board's communication, the patent proprietor requested that the decision under appeal be set aside and that the patent be maintained as amended on the basis of the claims of the main (and sole) request filed as the ninth auxiliary request by letter dated 23 June 2017, or as an auxiliary measure, on the

basis of one of the first to ninth auxiliary requests, filed as the tenth to eighteenth auxiliary requests by letter dated 30 December 2019, the tenth auxiliary request, filed as the fourth auxiliary request by letter dated 7 December 2016, or the eleventh auxiliary request, filed as the fifth auxiliary request by letter dated 7 December 2016.

- V. In reply to the patent proprietor's letter, the opponent requested that the patent proprietor's main and auxiliary requests not be admitted into the appeal proceedings.
- VI. The oral proceedings before the board were held on 10 March 2020.

The parties' final requests were as follows:

Appellant I (patent proprietor) withdrew all auxiliary requests on file and requested, as its main request, that the decision under appeal be set aside and that the patent be maintained as amended in the following version:

- Claims 1 to 4 of the main request, filed by letter dated 23 June 2017 as the ninth auxiliary request;
- Description: pages 2 and 3 filed at the oral proceedings of 10 March 2020 and pages 4 to 8 of the patent specification;
- Figures 1 to 14 of the patent specification.

Appellant II (opponent) requested that the decision under appeal be set aside and that the European patent be revoked.

At the end of the oral proceedings, the chairwoman announced the board's decision.

VII. This decision refers to the following documents:

- E8 JP 2006 329822 A
- E8a Machine translation of E8
- E8b Manual translation of E8, provided by the patent proprietor with the letter dated 23 June 2017
- E9 US 6 512 812 B2
- E10 US 4 366 382 A
- E14 Five photos filed by the opponent during the oral proceedings

VIII. Claim 1 of the sole request reads as follows:

*"1. An X-ray inspection device (100) adapted to detect foreign matter in a target object while the target object is conveyed, the X-ray inspection device (100) comprising:*

*an X-ray emission device (200) configured and arranged to emit X-rays at the target object;*

*a conveyor belt (800) including an endless belt rolled around a pair of rollers, a first portion (801) of the conveyor belt (800) configured to travel along a forward route, and a second portion (802) of the conveyor belt (800) configured to travel along a return route;*

*a scintillator unit (300) configured and arranged to optically convert the X-rays emitted by the X-ray emission device (200) into visible light, the scintillator unit (300) extending in a direction that intersects a conveyance direction (L1) of the target object;*

*and*

a photodiode array (400) configured and arranged to detect the visible light optically converted by the scintillator unit (300) and to convert the visible light into an electrical signal, the photodiode array (400) being disposed along a direction in which the scintillator unit (300) extends,

**characterized in that** the X-ray inspection device further comprises a slit member (500) forming a slit that extends in the direction that intersects the conveyance direction (L1), the slit member (500) disposed on an upstream side of the scintillator unit (300) with respect to a direction of X-ray irradiation so that only the X-rays that passed through the slit enter the scintillator unit (300);

wherein the slit member (500) is arranged so that a width (H3) of the slit is narrower than a width (H2) of the scintillator unit (300) in the conveyance direction of the target object, that the width (H3) of the slit is equal to or wider than half a light-receiving width (H1) of the photodiode array (400) in the conveyance direction of the target object, and that the presence of the slit member (500) causes the scintillator unit (300) to be irradiated with X-rays (S2) having a narrower width than the X-rays (S1) emitted by the X-ray emission device (200),

the slit member (500), the scintillator (300) and the photodiode array (400) are positioned in the stated sequence listed from the top, and are provided between the first portion of the conveyor belt (801) and the second portion of the conveyor belt (802), and

the X-ray emission device (200) is provided above the first portion of the conveyor belt (801)."

The main request in this case further includes dependent claims 2 to 4, which refer back to claim 1.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Admission of the patent proprietor's main request
  - 2.1 The patent proprietor requested that its main request be admitted into the proceedings and argued as follows:

The amended claims according to this request had been submitted in time since they had been filed with the statement of grounds of appeal as the ninth auxiliary request. The amendments were in response to the opposition division's decision and overcame the novelty objection based on the "*artificial*" interpretation of the claim (excluding such a beam limiting function) used by the opposition division in its decision. Claim 1 now clearly defined the slit's X-ray width regulating function which was at the core of the invention (see patent specification, paragraph [0077] and Figure 13). As this point was already discussed during the first-instance opposition proceedings, the introduction of this feature was not a surprise and did not lead to a complex case or introduce any new objections.

- 2.2 The opponent requested that this request be not admitted into the proceedings, arguing that it had been late-filed since it should have had been filed during the first-instance opposition proceedings. Furthermore,



the newly introduced features, which had been taken from the description, led to new objections under Articles 123(2), 83 and 84 EPC. Therefore, the late filing of the main request ran counter to procedural economy and led to a complex case.

2.3 In the present case, the statement of grounds of appeal was filed before the date on which the revised version of the Rules of Procedure of the Boards of Appeal (RPBA 2020) entered into force, i.e. 1 January 2020 (see OJ EPO 2019, A63). Thus, in accordance with Article 25(2) RPBA 2020, Article 12(4) to (6) RPBA 2020 does not apply. Instead, Article 12(4) RPBA 2007 continues to apply.

2.4 Article 12(4) RPBA 2007 requires the board to take into account everything presented by the parties under Article 12(1) RPBA 2007 if and to the extent it relates to the case under appeal and meets the requirements in Article 12(2) RPBA 2007. However, according to Article 12(4) RPBA 2007, the board has the discretionary power to hold inadmissible facts, evidence or requests which could have been presented or were not admitted in the first-instance proceedings (see Case Law of the Boards of Appeal of the European Patent Office ("Case Law"), 9th edition 2019, V.A.4.11.1).

The board takes the view that the patent proprietor's request could and should have been submitted in the first-instance proceedings since the slit's X-ray width regulating function was a point of discussion during the oral proceedings before the opposition division. Thus, in accordance with Article 12(4) RPBA 2007, it is at the board's discretion to admit this request into the appeal proceedings. Although the amendments in claim 1 stem from the description, they are not

surprising and do not lead to a complex case since they are clarifying the slit's X-ray width regulating function in terms that were already addressed and discussed during the first-instance proceedings (see decision under appeal, section "A - Main request", points 1.1.3, 1.1.4 and 1.1.5 (in particular subparagraphs "1f)" and "1g)") of the Reasons).

The board therefore exercised its discretion under Article 12(4) RPBA 2007 and decided to admit the patent proprietor's main request into the appeal proceedings.

3. Admission of the opponent's objection under Article 123(2) EPC

3.1 By comparison with claim 1 of the patent as granted, claim 1 of the present request additionally defines the following:

*"... that the presence of the slit member (500) causes the scintillator unit (300) to be irradiated with X-rays (S2) having a narrower width than the X-rays (S1) emitted by the X-ray emission device (200)".*

3.2 The opponent argued that claim 1 did not meet the requirements of Article 123(2) EPC because the feature added from the description (paragraph [0072]) was taken out of its context and therefore constituted an unallowable intermediate generalisation.

Furthermore, the feature was in contradiction to the general teaching of the patent (see paragraphs [0038] and [0043] and Figure 3 of the patent specification), according to which only X-rays which passed through the slit reached the scintillator. The current claim,

however, did not comprise this restriction, instead allowing other X-rays, e.g. X-rays on both sides of the slit, to reach the scintillator.

3.3 The patent proprietor argued that this objection was raised for the first time at the oral proceedings. As it constituted a "new case", this objection should not be admitted into the appeal proceedings.

3.4 In the present case, the summons to oral proceedings was notified before 1 January 2020. Thus, in accordance with Article 25(3) RPBA 2020, Article 13(2) RPBA 2020 does not apply. Instead, Article 13 RPBA 2007 continues to apply.

According to Article 13(1) RPBA 2007, the board has the discretion to admit and consider amendments made to a party's case after it has filed its statement of grounds of appeal or reply. The discretion has to be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy. Article 13(3) RPBA 2007 adds that amendments sought to be made after the oral proceedings have been arranged will not be admitted *"if they raise issues which the Board or the other party or parties cannot reasonably be expected to deal with without adjournment of the oral proceedings"*.

3.5 Article 13(1) RPBA 2007 merely lists examples of factors to be considered by the board when exercising its discretion and not an exhaustive set of criteria which must be cumulatively met, such that other considerations and well-established criteria relevant to the admissibility issue can also be taken into account (see Case Law, 9th edition 2019, V.A.4.1.2).

Nor do these criteria have to be cumulatively met. According to the case law of the boards of appeal developed in the context of Article 13(1) and (3) RPBA 2007, for amendments within the meaning of Article 13 RPBA 2007, such as facts and evidence submitted late, further criteria may also be applied, for example the relevance of the late-filed submission, the reasons for the late filing, whether the late filing has to be regarded as an abuse of procedure and whether it is a legitimate reaction to the decision at first instance (see e.g. Case Law, 9th edition 2019, V.A.4.13). According to established case law, discretion has to be exercised equitably, i.e. all relevant factors which arise in the particular circumstances of the case have to be considered and, in exercising this discretion, the circumstances of the specific case have to be taken into account (see Case Law, 9th edition 2019, V.A.4.3).

3.6 In the present case, the opponent's objection under Article 123(2) EPC is an amendment to its appeal case within the meaning of Article 13(1) and (3) RPBA 2007. The board took into account the criteria set out in Article 13(1) and (3) RPBA 2007, as well as those developed by the case law in the context of those provisions (see point 3.5 above). The objection under Article 123(2) EPC is not complex and could have been dealt with by the board or the patent proprietor during the oral proceedings without the need for adjournment. Therefore, the board exercised its discretion under Article 13(1) and (3) RPBA 2007 and decided to admit the opponent's objection into the appeal proceedings.

3.7 Furthermore, in some recent decisions where Article 13 RPBA 2007 was held to apply instead of Article 13(2) RPBA 2020, as in the case now before the board, Article 13(1) RPBA 2020 was considered to apply in addition

because this is not excluded by Article 25 RPBA 2020 (see e.g. decisions T 634/16 of 10 January 2020, points 7 to 14 of the Reasons, and T 32/16 of 14 January 2020, points 1.1.1 to 1.1.3 of the Reasons).

- 3.8 In the present case, however, the board does not consider it necessary to apply the criteria set out in Article 13(1) RPBA 2020 in addition to those which it may take into account when exercising its discretion under Article 13 RPBA 2007 (see points 3.4 and 3.5 above).
- 3.9 In cases where the summons to oral proceedings was notified on or after 1 January 2020, Article 13(2) RPBA 2020 implements the third level of the convergent approach applicable in appeal proceedings (see document CA/3/19, section VI, Explanatory remarks on Article 13(2), first paragraph, first sentence; see also Supplementary publication 2 to OJ EPO 2020). Article 13(2) RPBA 2020 imposes the most stringent limitations on appeal submissions made at an advanced stage of the proceedings, namely after expiry of a period set by the board of appeal in a communication under Rule 100(2) EPC or, where no such communication is issued, after notification of a summons to oral proceedings (see document CA/3/19, section VI, Explanatory remarks on Article 13(2), first paragraph, second sentence). Where an amendment is made to a party's appeal case at this advanced stage of the proceedings, Article 13(2) RPBA 2020 provides that it will in principle no longer be taken into account unless the party concerned has shown compelling reasons why the circumstances are exceptional. If such circumstances are shown to exist, the board of appeal may exercise its discretion and decide to admit an amendment made to the appeal case at this advanced stage of the proceedings (see document

CA/3/19, section VI, Explanatory remarks on Article 13(2), third paragraph, last sentence).

- 3.10 As to whether the provisions of Article 13(1) RPBA 2020 are to be applied in addition to those of Article 13(2) RPBA 2020 at the third level of the convergent approach, the board notes that Article 13(2) RPBA 2020 does not contain any explicit reference to the first paragraph of that article. However, the Explanatory remarks on Article 13(2) RPBA 2020 contain the following guidance:

*"At the third level of the convergent approach, the Board **may** also rely on criteria applicable at the second level of the convergent approach, i.e. as set out in proposed new paragraph 1 of Article 13."* (Document CA/3/19, section VI, Explanatory remarks on Article 13(2), fourth paragraph; emphasis added by the board.)

From this the board concludes that, at the third level of the convergent approach, the boards of appeal are free to use or not use the criteria set out in Article 13(1) RPBA 2020 when deciding, in the exercise of their discretion in accordance with Article 13(2) RPBA 2020, whether to admit an amendment made at this stage of the proceedings.

In this respect, Article 13(2) RPBA 2020 and Article 13(1) RPBA 2020 are also worded differently. In contrast to Article 13(2) RPBA 2020, in Article 13(1) RPBA 2020 the legislator has clarified, by means of the explicit reference in the second sentence to new Article 12(4) to (6) RPBA 2020, that the criteria specified in these paragraphs and already applicable at the first level of the convergent approach also apply

accordingly to any submissions made at the stage when the second level of the convergent approach applies (see also document CA/3/19, section VI, Explanatory remarks on Article 13(1), second paragraph, second sentence).

- 3.11 Where, as in the present case, Article 13 RPBA 2007, and not Article 13(2) RPBA 2020, applies to a discretionary decision taken at the third level of the convergent approach, the board's view is that it is likewise free to use the criteria of Article 13(1) RPBA 2020 in addition. It is not apparent from either the transitional provisions of Article 25 RPBA 2020 or the Explanatory remarks why the use of the criteria in Article 13(1) RPBA 2020 should be any different when Article 13 RPBA 2007, rather than Article 13(2) RPBA 2020, is to be applied at the third level of the convergent approach.
- 3.12 At the same time, however, the board considers that the criteria of Article 13(1) RPBA 2020 correspond in essence to those developed by the case law in the context of Article 13(1) RPBA 2007 (see also decisions T 634/16, point 14, second paragraph, of the Reasons, and T 32/16, point 1.1.3, second paragraph, of the Reasons). In its discretionary decision to admit the opponent's objection into the appeal proceedings, the board took into account the criteria set out in Article 13(1) and (3) RPBA 2007, as well as those developed by the case law in the context of those provisions (see points 3.4 to 3.6 above). Therefore it saw no reason to apply the criteria of Article 13(1) RPBA 2020 in addition.

4. Amendments - Article 123(2) EPC
  - 4.1 The opponent argued that claim 1 did not meet the requirements of Article 123(2) EPC (see point 3.2 above).
  - 4.2 The patent proprietor argued that claim 1 met the requirements of Article 123(2) EPC. The application as originally filed (see paragraph [0072]) provided a clear basis for the amendment, which was also in line with the general idea of the invention (see paragraphs [0069] to [0074]) that the slit ensured no unnecessary parts of the scintillator were irradiated with X-rays.
  - 4.3 The board is of the opinion that the amendment to claim 1 meets the requirements of Article 123(2) EPC.

The opponent has not disputed that the added feature is explicitly disclosed in the originally filed application in paragraph [0072] in connection with Figures 12 and 13. In addition, this disclosure explains the function of the slit member and - contrary to the opponent's submissions - is not in contradiction with the rest of the disclosure of the claimed invention, in particular the disclosure relating to Figure 3: in both Figure 13 and Figure 3 (see paragraphs [0038] and [0043]) only the X-rays that pass through the slit enter the scintillator unit. For this reason, as submitted by the patent proprietor, the aforementioned feature is not disclosed in the description of the original application as a distinct particular embodiment, but as a functional feature of the invention previously disclosed in the original application. Therefore, the feature is not taken out of context and the amended subject-matter does not constitute an unallowable intermediate generalisation.



As regards the opponent's submissions that the amended claim also allowed other X-rays at the sides of the slit to reach the oscillator, in contradiction with the general teaching of the patent, the board notes that, as pointed out by the patent proprietor, the claim explicitly requires that "**only** the X-rays that passed through the slit enter the scintillator unit" [emphasis added] (see first sub-paragraph of the characterising portion) and that, consequently, the amended claim excludes the possibility that X-rays other than those passing through the slit would reach the scintillator unit.

5. Novelty - Article 54 EPC

5.1 Admission of document E14

5.1.1 During the oral proceedings, the opponent presented five photos (document E14) and submitted that the photos showed the X-ray inspection device of document E10 and in particular the dimensions of such a device. It submitted that this document had not been filed at an earlier stage of the proceedings because it was found by accident shortly before the oral proceedings.

5.1.2 The patent proprietor requested that these photos not be admitted into the appeal proceedings because they were late-filed. Furthermore, the photos were not relevant for the discussion of novelty or inventive step because their public availability was not evident and the date they were taken was also unknown. Finally, the photos did not show any of the discussed features, particularly the slit for letting through X-rays.

5.1.3 In exercising its discretion under Article 13(1) and (3) RPBA 2007, the board decided not to admit the photos (E14) into the appeal proceedings because they were filed late, were prima facie not relevant for the discussion of novelty and inventive step as their publication date and their connection to the device in document E10 were not clear, and did not show the feature under discussion, i.e. a slit for passing X-rays to the scintillator.

5.2 Novelty in view of document E10.

5.2.1 The patent proprietor argued that document E10 failed to disclose a slit with the claimed shielding function for X-rays. Although E10 (see Figure 2) showed a slit, the document was silent about the type of material in which the slit was formed and therefore did not explicitly disclose an X-ray blocking material. The X-ray limiting function of the slit was not disclosed implicitly either: the core idea of E10 was to reduce the amount of X-rays passing through the scanned object (see column 1, line 50 to column 2, line 25). This object was achieved by X-ray shielding collimator plates (46, 47) which were placed between the X-ray source and the object and defined the optimised width of the X-ray beam (see Figure 2 and column 3, lines 23 to 43). Therefore, there was no need to further narrow the beam, e.g. by way of a slit in an X-ray shielding material.

With respect to the width of the X-ray beam at the slit, the patent proprietor argued that document E10 (see column 3, lines 37 to 43) disclosed that the beam reached the scintillator (18) in form of a strip, the width of which corresponded to the width defined by the adjustable collimator plates. This variable width had

to be within the fixed width of the slit because E10 (see column 3, lines 33 to 38) clearly disclosed that the adjustable width defined by the collimator plates defined the resolution of the system.

5.2.2 The opponent argued that document E10 (see Figure 2) disclosed a slit with the claimed shielding function for X-rays. Document E10 (see column 1, lines 32 to 36) taught that the X-ray intensity had to be kept high in order to ensure a proper signal/noise ratio. The skilled person would therefore inevitably choose a beam width which was broader than the slit shown in Figure 2. In addition, it would make no sense to provide the slit in a material that was transparent or semi-transparent to X-rays, and the detector cover in which the slit was formed also had to provide the function of blocking X-rays from leaving the detector. Therefore, the slit disclosed in E10 was inevitably provided in an X-ray absorbing material. In conclusion, the slit disclosed in Figure 2 of document E10 had the same beam limiting function as the claimed slit. As E10 also disclosed all the other features of claim 1, the claimed subject-matter was not novel over document E10.

5.2.3 The board is of the opinion that document E10 fails to disclose a slit member with the claimed function, i.e. a slit member disposed so that only the X-rays that passed through the slit entered the scintillator unit and where the presence of the slit member causes the scintillator unit to be irradiated with X-rays having a narrower width than the X-rays emitted by the X-ray emission device.

The board agrees with the parties' assessment that document E10 (see Figure 2) discloses a slit. E10 is, however, silent with respect to the slit's function and

the material of the detector cover in which the slit is formed.

The opponent's argument that the collimator plates of document E10 allowed for a beam width wider than the slit in the detector cover is not convincing because, according to document E10, the resolution of the inspection device is defined by the width of the X-ray beam, which in turn is regulated by the collimator plates 46 and 47 (see Figure 2, column 2, lines 41 to 56, and column 3, lines 22 to 36). Further limiting the beam width by means of the slit would therefore be contrary to the core idea of document E10.

Furthermore, the board is of the opinion that document E10 (see column 3, lines 36 to 43) discloses that the width of the X-ray beam is narrower than the width of the slit because otherwise the width of the slit would determine the resolution. Again, this would be contrary to the idea in document E10 that the resolution is determined by the beam width as defined by the collimator plates (see column 3, lines 36 to 38).

Furthermore, the board sees no implicit disclosure of an X-ray absorbing material as the material for the detector cover. The opponent's argument that the mere existence of the slit entailed an X-ray shielding function of the detector cover and therefore an X-ray absorbing material is not convincing. As discussed above, the collimator plates (46, 47) define the beam width. Therefore, the detector cover does not necessarily need to be made of metal.

The board therefore comes to the conclusion that the subject-matter of claim 1 of the main request is novel within the meaning of Article 54(1) and (2) EPC. The

same conclusion applies to the subject-matter of dependent claims 2 to 4.

6. Inventive step - Article 56 EPC

6.1 The patent proprietor argued that the subject-matter of claim 1 was inventive in view of document E10 as the closest prior art in combination with document E9 or document E8. The skilled person had no need to look for further possibilities for limiting the beam width because the core idea of document E10 was collimator plates which, by regulating the width of the X-ray beam, defined the resolution of an X-ray inspection device.

6.2 The opponent argued that, on the basis of the difference between claim 1 and the disclosure of document E10, the skilled person was faced with the problem of ensuring that no X-rays reached the edges of the scintillator.

The opponent referred to the following documents:

- E9 (abstract, Figures 1 and 6, column 7, lines 11 to 54, and column 14, lines 19 to 22), which taught the use of a slit 7 in a metal box 6 formed around the X-ray detection part 2, and
- E8 (Figure 3 and paragraph [0024]), which disclosed an opening 12c in an otherwise X-ray shielding conveyor frame 12b.

Both documents related to X-ray inspection devices and disclosed a slit with the claimed beam limiting function. In order to solve the above-mentioned problem, the skilled person would therefore apply the teaching of either document E9 or document E8 to

document E10 and thus arrive at the claimed subject-matter without an inventive step.

6.3 The board is not convinced by the opponent's arguments.

Firstly, document E10 teaches a complete solution for limiting the beam width via the collimator plates (see column 3, lines 28 to 38). The skilled person therefore has no reason to provide further elements, e.g. in the form of a slit, which limit the beam width even more. They would therefore not consult document E9 or E8.

Secondly, even if the teaching of one of those documents were applied to the device in E10, i.e. if the metal box with the slit disclosed in document E9 were to be used in the device shown in Figure 2 of E10, the slit would not have a beam limiting function as claimed because E10 requires the beam width to be determined by the collimator plates (see also point 5.2.3 above). The same argument applies to the disclosure of Figure 3 of document E8.

The board therefore comes to the conclusion that the combination of document E10 with either of documents E8 or E9 does not lead the skilled person to an X-ray inspection device comprising a slit with the claimed beam limiting function. For this reason, the subject-matter of claim 1 - and therefore also that of dependent claims 2 to 4 - of the main request involves an inventive step within the meaning of Article 56 EPC.

7. Amended description

The patent proprietor filed amended description pages adapted to the amended independent claim 1. Neither the

opponent nor the board had any objections with regard to the amended description.

## 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 as amended in the following version:
  - Claims: No. 1 to 4 of the main request, filed by letter dated 23 June 2017 as the ninth auxiliary request;
  - Description: pages 2 and 3 filed at the oral proceedings of 10 March 2020 and pages 4 to 8 of the patent specification;
  - Figures: 1 to 14 of the patent specification.

The Registrar:

The Chairwoman:



M. Kiehl

T. Karamanli

Decision electronically authenticated