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**Datasheet for the decision
of 20 April 2023**

Case Number: T 0803/20 - 3.4.02

Application Number: 14188905.5

Publication Number: 2860516

IPC: G01N25/72

Language of the proceedings: EN

Title of invention:

Device and method for verifying the construction of adhesively-attached substrates

Patent Proprietor:

VALCO CINCINNATI, INC.

Opponent:

Baumer hhs GmbH

Headword:

Relevant legal provisions:

EPC Art. 54(1), 56, 99(1), 100(a), 111(1)

EPC R. 76(2)(a)

RPBA 2020 Art. 11, 12(4), 12(6)

Keyword:

Admissibility of opposition - opponent identifiable (yes)

Novelty - main request (no)

Inventive step - first auxiliary request (no)

Remittal to the department of first instance (yes)

Decisions cited:

Catchword:



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Case Number: T 0803/20 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 20 April 2023

Appellant I: VALCO CINCINNATI, INC.
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Appellant II: Baumer hhs GmbH
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Representative: Strauss, Steffen
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
30 January 2020 concerning maintenance of the
European Patent No. 2860516 in amended form.**

Composition of the Board:

Chairman R. Bekkering
Members: A. Hornung
T. Karamanli

Summary of Facts and Submissions

I. Both the patentee and the opponent appealed against the interlocutory decision of the opposition division maintaining European patent No. 2 860 516 in amended form.

The opposition division had found that the patent as amended according to the first auxiliary request then on file and the invention to which it related met the requirements of the EPC.

II. Oral proceedings before the board were held on 20 April 2023.

Appellant I (patent proprietor) requested that the decision under appeal be set aside and that, as the main request, the patent be maintained as granted (i.e. that the opposition be rejected) or as the first auxiliary request, that the opponent's appeal be dismissed, or as the second to sixth auxiliary requests, that the decision under appeal be set aside and that the patent be maintained as amended on the basis of the claims according to the third to seventh auxiliary requests filed with its statement of grounds of appeal, or as the seventh auxiliary request, on the basis of the claims of the first auxiliary request filed with its statement of grounds of appeal.

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

III. The following documents, which were relied on in the first-instance opposition proceedings, are referred to in the present decision:

E9: JP 2013-130541,

E9a: machine translation of E9.

When referring to E9, actually the text of E9a will be quoted.

The patentee's written submissions are designated as follows:

P1: statement of grounds of appeal, filed with letter dated 9 June 2020,

P2: letter dated 26 October 2020 (reply to the opponent's statement of grounds of appeal),

P3: letter dated 20 March 2023.

The opponent's written submissions are designated as follows:

O1: statement of grounds of appeal, filed with letter dated 20 May 2020,

O2: letter dated 14 October 2020 (reply to the patentee's statement of grounds of appeal).

IV. Independent claim 1 of the patent as granted (patentee's main request) reads as follows (the features of granted claim 1 are preceded by the numbering **1.1** to **1.10**, as used in the appealed decision, point I.11, and in the parties' submissions):

1.1 A system (10) configured for checking the quality of hot melt (130) applied onto an object (100) that is assembled with said hot melt (130),

1.2 said system comprising an imaging device (20),

1.3 a controller (30) and a notification device (34) signally cooperative with one another such that:

1.4 said controller (30) is configured to determine if signals received from respective cameras or sensors (22, 24)

1.5 within said imaging device (20) meet predetermined deposition criteria for said hot melt (130) in said object (100); and

1.6 provide indicia to said notification device (34) of whether said predetermined deposition criteria is met,

1.7 said imaging device (20) being configured to detect both a thermal image that emanates from said hot melt (130)

1.8 and a geometric representation of said object (100),

1.9 said signals received therefrom containing at least one thermal image of said hot melt (130) and a geometric representation of said object (100);

1.10 characterized in that said geometric representation comprises any pictorial, data, mathematical or other representation that allows said received signals to be modeled, viewed or reproduced in two-dimensional or three-dimensional space".

Independent claim 1 according to the first auxiliary request differs from claim 1 of the main request in that it comprises the following additional features **1.11** and **1.12** at the end of the claim:

"**1.11** wherein said imaging device (20) comprises a first imaging device (22) configured to detect said thermal image and a second imaging device (24) configured to detect said geometric representation,

1.12 and wherein said notification device (34) comprises a display mechanism that is configured to depict an overlay representation of images from both of said first (22) and second (24) imaging devices for the purpose of locating said hot melt (130) with respect to at least one feature on said object (100)".

Reasons for the Decision

1. Identification of the opponent - admissibility of the opposition

1.1 According to the patentee's statement of grounds of appeal, point 5.1, it could not be clearly established on the basis of pages 1 and 4 of EPO Form 2300 and the notice of opposition whether the identity of the opponent was Mr Thomas Walther or the company Baumer hhs GmbH with Mr Walther as their representative.

Moreover, documents E9 and E9a were filed by Mr Steffen Strauss, Baumer Innotec AG, with letter dated 10 October 2019. The patentee submitted that there was "no apparent connection between Mr Steffen Strauss and Mr Thomas Walther and the submissions provided by Baumer Innotec AG provided no evidence of any connection to Baumer hhs GmbH or Mr Thomas Walther". From this, the patentee concluded that "the submissions of 10 October 2019 were not validly filed and should be disregarded".

Still further, the patentee submitted that "even if the identity of the Opponent can be unambiguously established, the Opponent has not established that Baumer Innotec AG

and, in particular, Mr Steffen Strauss has any right to represent the Opponent".

1.2 The board understands the patentee's objection raised in point 5.1 of its statement of grounds of appeal as an objection to the admissibility of the opposition in view of the requirements of Article 99(1) EPC and Rules 76(2)(a) and 41(2)(c) EPC.

Since this was a new objection raised in appeal proceedings, the board had discretion under Article 12(4) RPBA 2020, which is applicable in the case at hand pursuant to Article 25(1) and (2) RPBA 2020, to admit it into the appeal proceedings. In view of the fundamental importance of the question of admissibility of the opposition, the board, exercising this discretion, decided to admit this objection into the appeal proceedings.

In the case at hand, it is clear from the notice of opposition attached to EPO Form 2300 that the company Baumer hhs GmbH, Adolf-Dembach-Strasse 19, 47829 Krefeld, Germany, filed opposition to the patent in suit. This notice of opposition was signed by Mr Thomas Walther with reference to his general authorisation registered under No. 679040.6. In EPO Form 2300, Mr Thomas Walther was named as opponent, the address given being identical to that of the company Baumer hhs GmbH (see EPO Form 2300, page 1, point III). However, in section IV entitled "**Authorisation**" on page 2 of EPO Form 2300, Mr Thomas Walther is indicated as an employee of the opponent who is authorised to represent the opponent under Article 133(3) EPC, indicating his general authorisation registered under No. 679040.6. Section XII entitled "**Signature of opponent or representative**" on page 4 of EPO Form 2300, contains the signature of Mr Thomas Walther with the indication "ppa", which means **per procura auctoritate**, and again the

indication of the number of the registered general authorisation. In addition, in the same section, in the box "***In case of legal persons, signatory's position within company***", the position "Technischer Leiter" is indicated. In the board's view, it is therefore clear from EPO Form 2300 that Mr Thomas Walther was acting as an authorised employee of the company filing the opposition, which had granted him the general authorisation registered under No. 679040.6. The notice of opposition attached to EPO Form 2300 and the general authorisation No. 679040.6. show that the company concerned is Baumer hhs GmbH.

In view of the above considerations, the board concludes that it is sufficiently clear in the case at hand that the company Baumer hhs GmbH, represented by Mr Thomas Walther, filed the opposition. The requirements of Article 99(1) EPC and Rules 76(2)(a) and 41(2)(c) EPC are thus met. Since all other requirements of Article 99(1) EPC and **Rule 76 EPC are fulfilled**, the board considers the opposition admissible.

Moreover, the board notes that the EPO was informed by letter dated 10 October 2019 that the professional representative, Mr Steffen Strauss of Baumer Innotec AG, was entitled to represent the opponent in addition to Mr Thomas Walther. However, this notification of an additional representative, which was made after the opposition period had expired on 20 September 2018, cannot affect the admissibility of the present opposition.

2. Admittance of documents E9 and E9a

The board is of the view that that it has no discretion not to admit documents E9 and E9a into the present appeal proceedings. Therefore, these documents are taken into account in the present appeal proceedings.

- 2.1 Documents E9 and E9a were filed by the opponent with letter dated 10 October 2019, i.e. after the expiry of the opposition period on 20 September 2018.
- 2.2 The patentee objected to the admission of documents E9 and E9a for the following reasons:
- 2.2.1 Documents E9 and E9a were submitted by Mr Steffen Strauss in the name of Baumer Innotec AG. According to the patentee, since "the Opponent has not established that Baumer Innotec AG and, in particular, Mr Steffen Strauss has any right to represent the Opponent" (see P1, page 7, third paragraph), documents E9 and E9a were not validly filed.
- 2.2.2 According to the patentee, E9 and E9a were late-filed and "[t]here is no justification for the late filing of these documents" (see P1, page 8, sixth paragraph). Indeed, contrary to the justification given by the opponent, according to which the amendments made to the claims in the first and second auxiliary requests, filed on 8 February 2019, required a new search, the patentee was of the opinion that these amendments were entirely foreseeable and did not justify a new search (see P1, page 8, second paragraph).
- 2.2.3 According to the patentee, E9 was not *prima facie* relevant since E9 did not relate to boxes and since it did not disclose features **1.3** and **1.6**. "Late-filed evidence not filed in due time should only be admitted in the event that it reveals without further investigation (i.e. *prima facie*) that it is relevant, and document E9 therefore should not have been admitted into the proceedings" (see P1, page 9, second but last paragraph; highlighted in the original).

2.3 The opposition division admitted E9 and E9a into the proceedings for the following reasons:

In spite of E9 and E9a being filed after the expiry of the opposition period, the opposition division decided to admit E9 and E9a into the proceedings essentially for the reason that E9 seemed "prima facie relevant and even more relevant than the other documents already in the proceedings" (see appealed decision, point II.15.3). Moreover, it had "no doubts that Mr Strauss is qualified to represent the Baumer hhs GmbH and as such is authorized to file new documents into the proceedings" (see appealed decision, point II.15.3).

2.4 The board notes that documents E9 and E9a were admitted into the opposition proceedings by the opposition division and therefore became part of the opposition proceedings.

The board further notes that while under Article 12(6) RPBA 2020, which is applicable in the case at hand pursuant to Article 25(1) and (2) RPBA 2020, it is possible to admit documents that were not admitted in the first-instance proceedings, there is no basis in the said provision or elsewhere in the RPBA or the EPC for not admitting documents which were admitted in the first-instance proceedings. Therefore, the board takes the view that it has no discretion not to admit documents E9 and E9a into the appeal proceedings under Article 12(4) or (6) RPBA 2020. However, the opposition division's discretionary decision to admit these documents is open to review. When reviewing, it must be taken into account that in the case of discretionary decisions, the opposition division's exercise of discretion is usually reviewable only to a limited extent (see Case Law of the Boards of Appeal, 10th edition 2022, V.A.3.4.1). Such a discretionary decision should only be overruled in appeal

if the discretion has been exercised according to the wrong principles, or without taking into account the right principles, or in an unreasonable way.

2.5 The Board cannot see that the opposition division exercised its discretion incorrectly.

2.5.1 Concerning the issue of whether documents E9 and E9a were filed by a person authorised to represent the opponent, reference is made to the explanations given in point 1.2 above, from which it is clear that E9 and E9a were validly filed by Mr Steffen Strauss as the opponent's professional representative.

2.5.2 The opponent submitted during the first-instance opposition proceedings (see opponent's letter dated 10 October 2019, page 3, first paragraph) that the amendments made to the claims of the first and second auxiliary requests, both filed on 8 February 2019, justified a new search since the amended features did not correspond to features of dependent claims but were taken from the description. E9 was found during that new search.

The board agrees with the opponent that amendments to claims which were taken from the description may justify a new search for these amended features. If new documents are found during that new search, which the opposition division considers to be *prima facie* relevant, they may be admitted into the proceedings at the opposition division's discretion. The board currently sees no undue exercise of discretion in the opposition division's decision to admit E9 and E9a into the proceedings.

2.6 In view of the above, the board sees no reason to overrule the opposition division's discretionary decision to admit documents E9 and E9a into the opposition proceedings.

3. Main request - patent as granted - ground for opposition under Articles 100(a) and 54(1) EPC (lack of novelty)

The subject-matter of claim 1 of the patent as granted lacks novelty with respect to E9.

- 3.1 According to the patentee's written and oral submissions, features **1.3**, **1.5** and **1.6** of granted claim 1 are not disclosed in document E9 (see P1, page 13, second paragraph; P2, pages 9 to 12; point 3.4.1; P3, pages 2 to 5; point 3.1.1). In particular, E9 did neither disclose a notification device (feature **1.3**) nor the provision of indicia from the controller to the notification device (features **1.5** and **1.6**). The patentee did not argue that any further features of claim 1 were novel over E9. Nor does the board see any other feature of claim 1 that is not disclosed in E9.

- 3.2 The board is of the view that features **1.3**, **1.5** and **1.6** of granted claim 1 are disclosed in E9 for the following reasons:

- The "notification device" of claim 1 is not defined by structural technical features but only by its function, i.e. through its interaction with a controller: the notification device is signally cooperative with a controller and receives indicia from the controller. The notification device of claim 1 may be any item that performs only these two functions.
- Similarly, the "indicia" of claim 1 is broadly defined as any kind of signal related to whether some undefined deposition criteria are met.

- E9, [0024], figure 1, discloses an inspection unit (15) including a computer, the inspection unit (15) being "configured to inspect the adhesion state of the adhesion part 1a of the inspection object 1 along the following Step 1 to Step 4". In step 4, "the judgement signal is compared with a predetermined pass / fail judgement criterion. To emit" (see E9, [0031]).

The adhesion quality determination unit D of the inspection unit (15) of E9, comparing the judgement signal with the pass / fail criterion in step 4 of E9 (see E9, [0031]), corresponds to the controller of claim 1 determining whether signals received from the imaging cameras meet predetermined deposition criteria for the hot melt (feature **1.5**). The results of comparing the judgement signal with the pass / fail criterion correspond to the indicia mentioned in claim 1. These indicia are implicitly and necessarily provided to some item (not shown in figure 1 of E9) of the overall inspection system of E9, thereby notifying the user of whether or not the hot adhesive was correctly bonded to the object (feature **1.6**). This item, which is implicitly present in the inspection system of E9, is considered to be a "notification device" (feature **1.3**). Therefore, E9 implicitly discloses features **1.3**, **1.5** and **1.6**.

3.3 Counter-arguments of the patentee in favour of novelty

- 3.3.1 In all three of its written submissions P1 to P3 and during the oral proceedings, the patentee contended that the subject-matter of granted claim 1 was novel in view of E9 because "E9 fails to disclose an inspection apparatus comprising a 'notification device' capable of outputting notifications externally to an operator" (P3, page 3, fifth paragraph). For the patentee, the notification

device of claim 1 was a device capable of outputting some form of notification which "require further interpretation, e.g. by an operator or a controller, in order to process the information and produce any further actions" (P3, page 3, second paragraph).

The board is not convinced by this argumentation. Claim 1 does neither specify an operator nor a controller for receiving the notification emitted by the notification device and carrying any concrete further action. Therefore, such further actions cannot limit the scope of granted claim 1. The inspection apparatus (10) of E9, figure 1, comprises an inspection unit (15) receiving image signals from a thermal image acquisition unit (11) and from a visible image acquisition unit (12) (see, E9, [0021]). The inspection unit (15) includes a computer comprising an adhesion quality determination unit D. The inspection unit (15), based on the received image signals, is configured to inspect the adhesion state of the adhesion part (1a) of the inspection object (1) (see E9, [0024]; figure 2). The adhesion quality determination unit D of the inspection unit (15) provides a judgment signal which is compared with a predetermined pass/fail judgement criterion (see E9, [0031]). The result of this comparison provides information as to whether the deposition criteria are met. In other words, the result of this comparison corresponds to the indicia defined in feature **1.6** of claim 1. E9 is silent about what happens afterwards with the indicia. No further device is shown in figure 1 of E9 for receiving the indicia determined in the inspection unit (15) or in the computer included in the inspection unit (15). However, since the objective of the inspection apparatus of E9 is to check the adhesive quality of the hot melt, it is implicit that the indicia, determined by the inspection unit (15), are transmitted to a device which necessarily responds to the indicia to notify to an

operator or to a controller in some undefined way whether the deposition criteria are met. Therefore, this device plays the role of a notification device. This notification device is, for example, an image display, a controller that automatically rejects badly bonded objects, or an alarm device that alerts an operator.

In conclusion, a notification device capable of outputting some form of notification which "require further interpretation, e.g. by an operator or a controller, in order to process the information and produce any further actions" is implicitly disclosed in E9.

3.3.2 The patentee contested the implicit disclosures of E9. In particular, in the patentee's view, it was not directly and unambiguously derivable from E9 that indicia were provided to a notification device of the inspection unit (15) for notifying the user of whether the hot adhesive was correctly bonded to the object or not (P3, page 3, second but last paragraph).

It is to be acknowledged that E9 does not *explicitly* disclose a further device connected to the inspection unit (15) and receiving the indicia from the inspection unit (15). However, the adhesion quality determination unit D of the inspection unit (15) of E9 inspects and judges the adhesion state of the inspection object, wherein "the judgement signal is compared with a predetermined pass/fail judgement criterion" (see E9, [0031]). It is implicit for the skilled person that this result of the comparison, obtained in the inspection unit (15), is used in a further step to fulfil the objective of the inspection apparatus of E9 to check the adhesive quality of the hot melt. Otherwise, if the indicia would not be further used at all, the system of E9 would not completely fulfil the objective of inspecting the quality of the bonding

process. In order to fulfil this objective, the result of the comparison must necessarily be transmitted to some unspecified item, i.e. the "notification device", to react, i.e. "to notify", correspondingly. Therefore, E9 implicitly discloses providing indicia to a notification device.

3.3.3 The patentee submitted that "[t]he standard for assessing implicit disclosures is that such an alleged disclosure can only be considered 'implicit' if it is immediately apparent to the skilled person that nothing other than the alleged implicit feature could form part of the subject-matter disclosed" (P3, page 4, second paragraph). As an example of an alternative to the claimed feature of the indicia being provided to a notification device, the patentee stated that "the skilled person would reasonably expect that the outcome may be passed directly to a further controller of the automated production line to selectively filter objects from the continuous production line (and not to a notification device)" (P3, page 4, fourth paragraph).

The board can generally agree with the patentee about the standard for assessing implicit disclosures. Nevertheless, the board is unable to follow the patentee's reasoning because "the example of an alternative to the claimed feature of the indicia being provided to a notification device", i.e. the "further controller", given by the patentee actually falls under the scope of a "notification device". By selectively filtering objects from the continuous production line, an operator is notified about whether the adhesion state passes or fails the judgement criterion. The board does also not see any other "example of an alternative to the claimed feature of the indicia being provided to a notification device".

3.3.4 For the avoidance of any misunderstanding, the board's finding that the subject-matter of granted claim 1 is not novel is based neither on the disclosure of the personal computer with a display in paragraph [0013] of E9 nor on the disclosure of the computer in paragraph [0024] of E9, as had been argued by the opposition division and/or by the opponent.

- (a) According to the appealed decision, point 16.5, E9 disclosed that indicia "is indeed provided (cf. last line of para. [0031], 'to emit') to a notification device such as the computer mentioned in para. [0013] (features 1.3. and 1.6)".

The board is not convinced by this argument given in the appealed decision. As explained in the paragraph bridging pages 4 and 5 of the patentee's letter P3, the paragraph [0013] of E9 "merely describes the type of thermal image sensor that can be used - i.e. a low resolution, commercially available, image sensor of the type that *could* be connected to a personal computer to display a thermal image - however, we must emphasise that the thermal image sensor is not connected to a personal computer (having a display)" (highlight in the original). In view of [0013] of E9, the presence of a computer with a display in the inspection apparatus of E9 is only a possibility.

- (b) The opponent, with reference to E9, [0024], asserted in general terms that E9 disclosed a notification device (02, pages 10 and 11).

The board is not convinced by this argument of the opponent. Except from generally referring to paragraph [0024] of E9 which mentions a computer included in the

inspection unit (15), the opponent provides no explanation where a notification device would effectively be disclosed in E9. Paragraph [0024] of E9 discloses an inspection unit (15) which includes a computer. As submitted by the patentee in its letter P2, point 3.4.1.2, and during oral proceedings, the inspection unit (15) including a computer corresponds to the controller defined in feature **1.3** of claim 1, but no further notification device is disclosed in [0024] of E9.

3.4 Since the subject-matter of granted claim 1 lacks novelty, the ground for opposition under Articles 100(a) and 54(1) EPC prejudices the maintenance of the patent as granted.

4. First auxiliary request

The subject-matter of claim 1 of the first auxiliary request, which the opposition division found to meet the requirements of the EPC, does not involve an inventive step in view of E9 in combination with common general knowledge (Article 56 EPC).

4.1 The reasons for the lack of inventive step are as follows:

4.1.1 Distinguishing features

The subject-matter of claim 1 differs from E9 in that the implicitly disclosed notification device comprises a display mechanism that is configured to depict an overlay representation of images from the imaging devices, i.e. the distinguishing feature corresponds to feature **1.12** of claim 1.

4.1.2 Objective technical problem

According to the patentee, the technical effect of the distinguishing feature **1.12** can be "considered to be that information available in the assessment of adhesive application quality is increased or improved" (P2, page 21, third paragraph). "[T]he objective technical problem can be considered to be how to increase or improve the information available to facilitate the quality check of an adhesive deposition" (P2, page 21, fourth paragraph). The board can agree with this.

It is to be noted that during the oral proceedings the opponent proposed another formulation of the objective technical problem, namely, how to improve the effectiveness of the inspection of the bonding process. This wording is very similar in content to that of the patentee and would also be acceptable.

4.1.3 Claimed solution is obvious

It is assumed that the image data provided by the thermal camera and the visual camera of E9 is not displayed on a screen for being viewed by a user but is used in another way to notify the user of whether or not the hot adhesive has been correctly applied to the object (see point 3.3.1 above for examples of alternative ways to notify a faulty bond). This gives the skilled person basic information about whether or not the bonding process was successful, but he lacks information about what exactly the defect looks like and how exactly the bonding process took place. This missing information would improve the understanding of the overall bonding process and therefore its subsequent optimisation. Therefore, the skilled person, starting from E9, is actually confronted with the technical problem of improving the information available to facilitate the quality check of the adhesive deposition.

As discussed during oral proceedings, in order to solve the objective technical problem, it would be obvious for the skilled person to provide a display on which the two images taken by the two cameras can be viewed by an operator. Indeed, viewing the images of the hot melt, the bonded object and of its surroundings directly on a display provides more precise information than, for example, a binary pass/fail judgement. Checking the overall quality of the adhesive deposition process is clearly facilitated by viewing images of the bonded objects. Moreover, E9 already generally suggests displaying a thermal image based on the image data provided by the thermal image sensor (E9, [0013]).

The skilled person is provided with two separate images of the same object in two distinct wavelength ranges. The thermal image has a low image resolution but provides information about the hot melt adhesive and about parts of the object hidden behind other parts of the object. The visual image has a high image resolution (E9, [0022]) and provides visual information to which the user is more familiar with. Both images are taken in synchronization (E9, [0033]) so that the coordinate system obtained from the visual image is used in the thermal image to ascertain the position of the points of interest in the thermal image (E9, [0013] and [0033]).

In order to still further enhance the quality of the displayed image information and facilitate the quality check of the adhesive deposition process, it would be obvious for the skilled person to combine the two displayed images in one image, just as taught in a prior art document cited in E9, [0005]. In this way, object details that are not easily recognisable in a thermal image, even in a thermal image that has undergone super-

resolution processing as described in E9, [0018], will be more clearly visible in the overlay image. It is also more efficient for the user to view two images comprising the same point of interest in a single combination image than to switch back and forth between the two individual images.

4.1.4 By combining the image information of the thermal image and the visual image and displaying the combined image on a display device, the skilled person would arrive at feature **1.12** in an obvious manner.

4.2 Counterarguments of the patentee in favour of inventive step

4.2.1 The patentee, during oral proceedings, put forward that the skilled person would not implement the solution taught in the prior document referred to as "patent document 4" in paragraphs [0005] and [0009] of E9. According to P3, page 12, fifth paragraph, "E9 itself teaches that [patent document 4] discloses a more complex and expensive apparatus", that "it was not possible to improve the decrease in resolution" and that, therefore, the skilled person is "actively discouraged from combining the thermal image and the visual image in any manner taught in [patent document 4]".

The board is not convinced by this argument. The skilled person does not in fact necessarily need a suggestion from "patent document 4" of E9 in order to consider combining the two images from the thermal camera and the visible camera. By virtue of his inherent reasoning ability and expertise alone, the skilled person is aware of the technical advantage of combining the two individual images.

Even if the low resolution of the thermal image could not be improved by superposing a visible image, the board agrees with the opponent's submission during oral proceedings that other aspects contributing to the overall image quality, such as brightness, visibility or contrast, may be improved by combining the two images.

Whether the special device of "patent document 4" of E9 is complex and expensive and whether it has a different design with a single optical axis also does not play a decisive role, since the skilled person does not want to use the entire device of the "patent document 4" of E9, but would only take the hint to overlap thermal and visible images.

- 4.2.2 The patentee submitted that the skilled person, starting from the inspection device of E9, had no incentive to consider a visual inspection of the hot melt applied onto an object. E9 related to a continuous production line where the quality of the bonding was checked only via a basic pass/fail signal. E9 provided no reason for an operator-based inspection process.

The board cannot agree with the patentee. As explained in point 4.1.3 above, since the skilled person, starting from E9, only possesses basic information about the bonding process, it has a clear incentive to enhance the information available about the bonding process. Moreover, as submitted by the opponent during oral proceedings, if cameras are already used in E9 to monitor the bonding process, the most obvious thing is actually to view the images produced by the cameras on a screen as well. During oral proceedings, the opponent pointed to [0006] of E9 disclosing a further hint towards combining images, namely "a composite image obtained from a combination of a far-infrared camera image and a visible image camera".

4.3 For the above reasons, the subject-matter of claim 1 of the first auxiliary request, which the opposition division found to meet the requirements of the EPC, does not involve an inventive step in view of E9 in combination with common general knowledge. Therefore, the interlocutory decision of the opposition division cannot be upheld.

5. Remittal of the case

The board considers it appropriate to make use of its discretion under Article 111(1), second sentence, EPC and Article 11 RPBA 2020 in remitting the case to the opposition division for further prosecution.

5.1 For the reasons provided in point 4. above, the board came to the conclusion that the subject-matter of claim 1 of the first auxiliary request lacked an inventive step and that, therefore, the appealed decision had to be set aside.

5.2 The board notes that the patentee filed during the appeal proceedings six further auxiliary requests, i.e. present second to seventh auxiliary request, and that currently it maintained all these requests. The board further notes that five of these further requests, i.e. present second to fifth and seventh auxiliary requests, are substantially identical to the requests filed by the patentee during the first-instance proceedings. The decision under appeal did not deal with claim 1 of any of these six auxiliary requests. The patentability of the subject-matter of claim 1 of these auxiliary requests would therefore have to be assessed for the first time during the appeal proceedings.

In addition, in view of the numerous objections of lack of inventive step, lack of clarity and added subject-matter raised by the opponent throughout the appeal proceedings, the board considers that the assessment of the patentability of claim 1 of the second to seventh auxiliary requests would comprise a complexity in terms of the number of new issues not compatible with the primary object of the appeal proceedings to review the decision under appeal in a judicial manner (Article 12(2) RPBA 2020).

- 5.3 The opponent requested that the case not be remitted but that the board decide on the objection of lack of inventive step of the subject-matter of claim 1 of the auxiliary requests on file. In the opponent's view, the remittal of a case required "special reasons" within the meaning of Article 11 RPBA 2020 which in the present case were not present. The current second to fifth and seventh auxiliary requests were lying within the legal and technical framework of the present first auxiliary request. In particular, the lack of inventive step of the subject-matter of claim 1 of these further auxiliary requests could be argued along the same lines as for claim 1 of the first auxiliary request. Concerning the sixth auxiliary request, which was filed for the first time during the appeal proceedings, the board should decide on its admission before remitting the case to the opposition division. In case that the board decided to remit the case to the opposition division, the opponent asked the board to clarify in its decision that the opposition division should deal only with the current second to fifth auxiliary requests corresponding to the third to sixth auxiliary requests filed with the patent proprietor's statement of grounds of appeal.

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

First, the board does not consider it appropriate to decide on the admittance of the sixth auxiliary request before remitting the case to the opposition division. Even if this auxiliary request was filed for the first time with the patentee's statement of grounds of appeal, so that it would possibly be within the board's power under Article 12(4) or (6) RPBA 2020 to hold it inadmissible, such an approach would essentially disregard the order of the patentee's requests. By its very nature, an auxiliary request is a request for amendment that is contingent upon higher-ranking (main or auxiliary) requests being held inadmissible or unallowable. As no examination of the claims of the second to fifth auxiliary requests has taken place yet, a decision on the admittance of the lower-ranking sixth auxiliary requests is not appropriate in the present case before a remittal.

The appealed decision only dealt with objections to claim 1 of the patent as granted (main request) and the present first auxiliary request. In the case at hand, examining new features and deciding whether they comply with all the requirements of the EPC goes beyond the task of an appellate instance. The "special reasons" within the meaning of Article 11 RPBA 2020 are that it would be unduly burdensome for the board to have to deal with six auxiliary requests for the first time in the appeal proceedings and that the opponent had raised several objections under Articles 54(1), 56, 84, 123(2) and/or 123(3) EPC against at least some of these six auxiliary requests during the written procedure. Moreover, contrary to what the opponent suggested, there is no legal basis for the board to limit in its remittal decision the scope of further examination by the opposition division to the current second to fifth auxiliary requests.

5.5 The patentee was in favour of a remittal.

5.6 In view of the above, there are "special reasons" within the meaning of Article 11 RPBA 2020 in the case at hand which justify remitting the case to the opposition division for further prosecution under Article 111(1), second sentence, EPC.

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 for further prosecution.

The Registrar:

The Chairman:



L. Gabor

R. Bekkering

Decision electronically authenticated