BESCHWERDEKAMMERN
DES EUROPÄISCHEN
PATENTAMTS

BOARDS OF APPEAL OF
THE EUROPEAN PATENT
OFFICE

CHAMBRES DE RECOURS
DE L'OFFICE EUROPÉEN
DES BREVETS

Internal distribution code:
(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

Datasheet for the decision
of 26 October 2023

Case Number:	T 2486/19 - 3.5.04
Application Number:	10844834.1
Publication Number:	2529358
IPC:	G06T17/05, G06T17/20, G06T7/00, H04N13/02
Language of the proceedings:	EN

Title of invention:
AN AUTOMATED THREE DIMENSIONAL MAPPING METHOD

Applicant:
Saab AB

Headword:

Relevant legal provisions:
EPC Art. 83, 111(1), 113(1)
EPC R. 103(1)(a)
RPBA 2020 Art. 11, 12(1)(d), 13(1), 13(2)

Keyword:
Remittal - fundamental deficiency in first-instance
proceedings (no)
Reimbursement of appeal fee - violation of the right to be
heard (no)
Main request - sufficiency of disclosure (no)
First and second auxiliary request - amendment to appeal case
- amendment overcomes issues raised (no)

Decisions cited:
T 0248/92, T 1164/00, T 2235/12

Catchword:

Case Number: T 2486/19 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 26 October 2023

Appellant: Saab AB
(Applicant)   581 88 Linköping (SE)

Representative: Zacco Sweden AB
                            P.O. Box 5581
                            Löjtnantsgatan 21
                            114 85 Stockholm (SE)

Decision under appeal: **Decision of the Examining Division of the
                            European Patent Office posted on 30 January 2019
                            refusing European patent application
                            No. 10844834.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair   B. Willems
Members: A. Seeger
                  G. Decker

Summary of Facts and Submissions

I.   The appeal is against the examining division's decision
        to refuse European patent application No. 10 844 834.1,
        published as international patent application
        WO 2011/093752 A1.

II.   The prior-art documents cited in the decision under
        appeal were the following:
        D1: EP 0 907 144 A2
        D2: EP 1 612 733 A2

III.   The decision under appeal was based on the ground that
        the claims of the main request and the first auxiliary
        request then on file did not meet the requirements of
        Article 83 EPC. The second auxiliary request was not
        admitted into the proceedings under Article 114(2) EPC.

IV.   The applicant (appellant) filed notice of appeal. With
        the statement of grounds of appeal, the appellant filed
        claims according to a main request and an auxiliary
        request. It indicated a basis in the application as
        filed for the claimed subject-matter and provided
        arguments to support its opinion that the claims met
        the requirements of Articles 56 and 83 EPC.
        Furthermore, the appellant requested that the appeal
        fee be reimbursed because its right to be heard under
        Article 113(1) EPC had been violated.

V.   The appellant was summoned to oral proceedings. In a
        communication under Article 15(1) RPBA 2020, the board
        gave the following preliminary opinion.

        (a) The board could see no basis for reimbursement of
            the appeal fee under Rule 103(1)(a) EPC.

(b) Claim 1 of the main request and the auxiliary
    request did not meet the requirements of
    Articles 83 and 84 EPC.

VI.   With its letter dated 28 August 2023, the appellant
        filed amended claims of a first and a second auxiliary
        request to replace all auxiliary requests on file. The
        appellant requested that the case be remitted to the
        examining division. It reasoned that the examining
        division made an error when raising fresh objections
        under Article 83 EPC. The appellant argued that the
        first and second auxiliary requests formed a basis for
        the appeal proceedings pursuant to Article 12(1)(d)
        RPBA 2020 and should be admitted into the proceedings
        under Articles 13(1) and (2) RPBA 2020. It also
        indicated a basis in the application as filed for the
        amendments and provided arguments to support its
        opinion that the claims of all requests met the
        requirements of Articles 83 and 84 EPC.

VII.   With its letter dated 26 September 2023, the appellant
        withdrew its request for oral proceedings.

        Thus, it appears from the file that the appellant
        requests that the decision under appeal be set aside
        and the case be remitted to the department of first
        instance, or that a European patent be granted on the
        basis of the claims of the main request filed with the
        statement of grounds of appeal or, alternatively, on
        the basis of the claims of either the first or second
        auxiliary request, both auxiliary requests filed with
        the appellant's letter dated 28 August 2023.
        Furthermore, the appellant requests that the appeal fee
        be reimbursed.

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

"An automated three dimensional mapping method
estimating three dimensional models taking advantage of
a plurality of images (44), wherein
-    the positions (x, y, z) and attitudes (α, β, γ) for
     at least one camera (2) are recorded when images
     are taken, wherein said at least one camera (2) is
     geometrically calibrated to indicate the direction
     of each pixel in an image (44),
-    a stereo disparity is calculated for a plurality of
     image pairs (27-31) covering a same scene position
     setting a disparity and a certainty measure
     estimate for each stereo disparity
-    the different stereo disparity estimates are
     weighted together to form a 3D height model,
-    the stereo disparity estimates are reweighted
     automatically and adaptively based on the normal
     vectors of the estimated 3D height model, and
     wherein
-    the certainty measure estimate for each disparity
     is set (46) in consideration of visibility, local
     contrast, and/or resolution"

IX.   Claim 1 of the first auxiliary request reads as follows
      (features added compared with claim 1 of the main
      request are underlined and deleted features are ~~struck
      through~~):

"An automated three dimensional mapping method
estimating three dimensional models taking advantage of
a plurality of images (44), wherein
-    the positions (x, y, z) and attitudes (α, β, γ) for
     at least one camera (2) are recorded when images
     are taken, wherein said at least one camera (2) is

geometrically calibrated to indicate the direction of each pixel in an image (44),

- a stereo disparity is calculated for a plurality of image pairs (27-31) covering a same scene position setting a disparity and a certainty measure estimate for each stereo disparity,

- the different stereo disparity estimates are weighted together to form a 3D height model taking notice of the certainty measure estimate,

- the stereo disparity estimates are reweighted automatically and adaptively based on the normal vectors of the estimated 3D height model, and wherein

- the certainty measure estimate for each disparity is set (46) in consideration of ~~visibility,~~ local contrast and/or resolution."

X.   Claim 1 of the second auxiliary request reads as follows (features added compared with claim 1 of the main request are underlined and deleted features are ~~struck through~~):

"An automated three dimensional mapping method estimating three dimensional models taking advantage of a plurality of images (44), wherein

- the positions (x, y, z) and attitudes (α, β, γ) for at least one camera (2) are recorded when images are taken, wherein said at least one camera (2) is geometrically calibrated to indicate the direction of each pixel in an image (44),

- a stereo disparity is calculated for a plurality of image pairs (27-31) covering a same scene position setting a disparity and a certainty measure estimate for each stereo disparity,

- the different stereo disparity estimates are weighted together to form a 3D height model taking notice of the certainty measure estimate,
- the stereo disparity estimates are reweighted automatically and adaptively based on the normal vectors of the estimated 3D height model taking obscuration into consideration, such that for example an image taken from above is used to estimate the roof structure and not the sides of a building, and wherein
- the certainty measure estimate for each disparity is set (46) in consideration of ~~visibility,~~ local contrast and/or resolution."

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

Remittal and reimbursement of the appeal fee

(a) During the oral proceedings before the examining division fresh objections under Article 83 EPC, which took the appellant by surprise, were raised. In view of the examining division's statements in the annex to the summons to oral proceedings, the appellant could not have prepared to address these objections.

Due to the change of subject during the oral proceedings the appellant thus did not have sufficient opportunity to present counter-arguments during those oral proceedings before the examining division. The examining division therefore acted incorrectly by not postponing the oral proceedings.

In view of the above, the appellant's right to be heard under Article 113(1) EPC was violated. Thus,

the case should be remitted to the examining division for further prosecution, and the appeal fee should be reimbursed.

Main request

(b) Using normal vectors for reweighting stereo disparities was common general knowledge of the person skilled in the art.

(c) As evidence that weighting of disparity estimates based on normal vectors was common general knowledge the appellant referred to document WO 2009/084993 A1 (see statement of grounds of appeal, section 2.1.2).

(d) Page 6, lines 9 to 15 of the description indicated at least one way to carry out the feature in question. From this passage it was clear that the normal vectors of the estimated 3D height model were used in the reweighting of the stereo disparity estimates to enable the use of stereo disparities originating from image pairs taken from obscured attitudes/positions to be avoided in the reweighting to form a 3D model.

First and second auxiliary requests

(e) The first and second auxiliary requests formed a basis for the appeal proceedings under Article 12(1)(d) RPBA 2020 because they had been submitted in reply to the board's communication (see letter dated 28 September 2023: sections II.1 and III.1, paragraph under the heading "Article 12(1)(d) RPBA 2020").

(f) The first and second auxiliary requests fulfilled
    the requirements of Article 83 EPC for the reasons
    set out in point (d) above and should therefore be
    admitted into the appeal proceedings (see letter
    dated 28 September 2023: sections II.3 and III.2).

Reasons for the Decision

1.   The appeal is admissible.

2.   Request for remittal of the case to the examining
        division for further prosecution (Article 111(1),
        second sentence, EPC, and Article 11 RPBA 2020)

2.1   Under Article 111(1), second sentence, EPC, the board
        may either exercise any power within the competence of
        the department which was responsible for the decision
        appealed or remit the case to that department for
        further prosecution.

        Under Article 11 RPBA 2020 the board will not remit a
        case to the department whose decision was appealed for
        further prosecution, unless special reasons present
        themselves for doing so. As a rule, fundamental
        deficiencies which are apparent in the proceedings
        before that department constitute such special reasons.

2.2   The appellant argued that during the oral proceedings
        before the examining division fresh objections under
        Article 83 EPC, which took the appellant by surprise,
        were raised. In view of the examining division's
        statements in the annex to the summons, the appellant
        could not have prepared to address these objections.

        To be in a position to argue against these objections,
        the appellant would have needed to prepare a basis for

the standpoint of the skilled person at the date of filing and their common general knowledge at that point in time.

Due to the change of subject during the oral proceedings before the examining division, therefore, the appellant did not have sufficient opportunity to present counter-arguments during those oral proceedings. In this regard, the appellant referred to the decisions T 1164/00, T 2235/12 and T 248/92 (see statement of grounds of appeal, section 1).

The appellant submitted that it had tried to come up with arguments during the oral proceedings before the examining division but was indeed taken by surprise and, in this stressful situation, "did not find itself" to request postponement of the oral proceedings. Given the nature and extent of the fresh objections under Article 83 EPC, the appellant was not given enough time to respond to all of these objections. The examining division therefore acted incorrectly by not postponing the oral proceedings (see letter dated 28 August 2023: section I.1, first paragraph to third paragraph).

In view of the above, the appellant submitted that its right to be heard under Article 113(1) EPC had been violated (see point XI.(a) above).

2.3   The board is not convinced by these arguments, for the following reasons.

2.3.1 The board agrees with the appellant that fresh objections under Article 83 EPC were raised by the examining division during the oral proceedings. These objections were indeed different from the objection

under Article 83 EPC mentioned in point 2.3.1 of the
annex to the summons.

2.3.2   However, when faced with these fresh objections during
         the oral proceedings, the appellant was asked by the
         chairman of the examining division whether it needed a
         break to consider the new objections (see minutes of
         oral proceedings, point 4.8). There is no indication
         that the appellant asked for interruption or
         postponement of the oral proceedings. Rather, the
         appellant commented in substance on the new objections
         and provided several counter-arguments (see minutes of
         oral proceedings, points 5.1, 5.2 and 7).

2.4   Therefore, in the absence of any request by the
         appellant for the oral proceedings to be interrupted or
         postponed, the board finds that the appellant was not
         denied the time it deemed necessary to deal with the
         fresh objections and thus the appellant's right to be
         heard under Article 113 EPC was not violated.

2.5   The appellant referred to the following decisions:
         T 1164/00, T 2235/12 and T 248/92.

2.5.1   T 1164/00 relates to a situation in which the patent
         proprietor objected to a new ground of opposition being
         introduced by the opposition division for the first
         time during the oral proceedings. The appellant/patent
         proprietor reasoned that the opposition division had
         committed a substantial procedural violation by raising
         a new ground during oral proceedings. The board found
         that the opposition division should have adjourned the
         oral proceedings in order to give the appellant
         sufficient time to prepare a suitable defence against
         the new objections.

In T 2235/12 the examining division introduced two new documents two days before the oral proceedings and raised a new novelty objection based on one of those documents. The applicant requested postponement of the oral proceedings, which the examining division rejected. The board found that rejecting the appellant's request for postponement of the oral proceedings violated the appellant's right to be heard.

The board finds that cases T 1164/00 and T 2235/12 are clearly different from the present situation. In those cases the appellant objected to the introduction of a new ground of opposition or requested postponement of the oral proceedings when faced with a fresh objection and did <u>not</u> enter into a substantive discussion.

2.5.2 In T 248/92 the relevant objection of lack of inventive step based on common general knowledge was raised for the first time during the oral proceedings before the examining division. In that case the applicant did not present any arguments or requests in relation to the new objection raised by the examining division. In particular, the applicant did not request adjournment of the oral proceedings, and nor did it request that the proceedings be continued in writing. Therefore, the board found that the examining division was entitled to conclude that the matter had been thoroughly discussed and that a decision could be taken. In these circumstances, no violation of Article 113(1) EPC was found.

The board finds that it is even clearer in the current case than it was in T 248/92 that the appellant did not request interruption or postponement of the oral proceedings but entered into the substantive discussion of the fresh objections by providing several counter-

arguments. Hence, at the end of that discussion the examining division was entitled to conclude that the matter had been thoroughly discussed and that a decision could be taken.

2.6   In view of the above, the board sees no violation of the appellant's right to be heard or any other fundamental deficiencies which are apparent in the proceedings before the examining division.

2.7   Therefore, the board does not remit the case to the department of first instance in accordance with Article 11 RPBA 2020 and Article 111(1), second sentence, EPC.

3.   Request for reimbursement of the appeal fee (Rule 103(1)(a) EPC) due to a violation of the right to be heard (Article 113(1) EPC)

3.1   Under Rule 103(1)(a) EPC the appeal fee is reimbursed in full where the board deems an appeal to be allowable, if such reimbursement is equitable by reason of a substantial procedural violation.

3.2   For the reasons set out in point 2. above, the board finds that the appellant's right to be heard was not violated in the first-instance proceedings and thus no substantial procedural violation occurred. Therefore, the appeal fee is not reimbursed.

4.   Main request - sufficiency of disclosure (Article 83 EPC)

4.1   Under Article 83 EPC, a European patent application must disclose an invention in a manner sufficiently

clear and complete for it to be carried out by the person skilled in the art.

An invention is in principle sufficiently disclosed if at least one way is clearly indicated enabling the person skilled in the art to carry out the invention (see Case Law of the Boards of Appeal of the European Patent Office, 10th edition, 2022 ("Case Law"), II.C.5.2).

The claimed invention must be sufficiently disclosed as from the effective date of filing of the application. This disclosure is aimed at the person skilled in the art who may rely on common general knowledge to supplement the information contained in the patent application. Textbooks and general technical literature form part of the common general knowledge, which however does not normally include scientific articles and patent literature (see Case Law, II.C.4.1).

4.2   Claim 1 of the main request contains the following feature: "*the stereo disparity estimates are reweighted automatically and adaptively based on the normal vectors of the estimated 3D height model*"

4.3   The board finds that this feature is not disclosed in a manner sufficiently clear and complete for it to be carried out by the person skilled in the art. The reasons are as follows.

4.3.1   The application as originally filed contains the following disclosures relating to this feature:

-       "*The stereo disparity estimates could for example be reweighted based on normal vectors of the estimated 3D model*" (see page 2, lines 17 and 18)

- "*From this first model the original stereo
  estimates are reweighted automatically and
  adaptively based on normal vectors of the estimated
  3D model taking information such as visibility,
  local contrast, resolution and visibility such as
  obscuration into consideration. In this connection
  for example an image taken straight above a
  building is used to estimate the roof structure and
  not the sides of a building. Another example could
  be to avoid mixing of the front side and back side
  of buildings*" (see page 6, lines 9 to 15).

4.3.2   The board is of the opinion that the passages of the
        original application quoted above do not provide more
        insight than the wording of the feature itself.

        In particular, the direction of the normal vector of a
        roof surface may differ significantly from the
        orientation of the optical axis of a camera taking an
        image from straight above a building, depending on the
        type and inclination of the roof.

4.3.3   Furthermore, the board is of the opinion that it is not
        evident that the person skilled in the art, using their
        common general knowledge, would understand how to use
        the normal vectors of an estimated 3D model to reweight
        the stereo disparity estimates.

4.3.4   The appellant submitted that using normal vectors for
        reweighting stereo disparities was common general
        knowledge of the person skilled in the art. The
        appellant argued that, if a stereo pair of images was
        recorded from camera angles deviating only slightly
        from the normal vector, the resulting disparity
        estimate would be given a high weighting based on a

good correspondence between the images comprising
essentially the same features (see statement of grounds
of appeal, section 2.1.2 thereof, and point XI.(b)
above).

The board is not convinced by this argument, for two
reasons.

Firstly, the appellant has not provided any evidence,
e.g. a reference to a textbook about stereo imaging, to
corroborate its assumption.

Secondly, the board doubts whether the relationship
submitted by the appellant - according to which camera
angles that deviate only slightly from the normal
vector will yield the most reliable disparity estimates
- is common general knowledge and is generally true.
The board finds it helpful to illustrate this with the
following example. A human being with ordinary
estimation skills can produce a disparity estimate,
i.e. an estimate of a distance between themselves and
objects they see with their eyes. If the distance
between the object and the human being is small, this
distance can normally be estimated quite accurately.
However, as the distance between the object and the
human being increases, the distance estimate becomes
less accurate. A small distance between the human being
and the object means that the angles between the rays
connecting each eye with the object and the vector
connecting the point between the eyes and the object
are substantial. Conversely, a large distance between
the human being and the object means that the rays
connecting each eye with the object are almost parallel
to the vector connecting the point between the eyes and
the object.

4.3.5   As evidence that the weighting of disparity estimates
         based on normal vectors was common general knowledge,
         the appellant referred to document WO 2009/084993 A1
         (see point XI.(c)).

         The board is not convinced by this line of argument,
         for two reasons.

         Firstly, this document discloses which image data to
         use when rendering a surface of a 3D model. In
         particular, the image data for rendering is selected
         such that the direction of the camera when capturing
         the image data is substantially normal to the surface
         to be rendered - see for example page 5, lines 19 to 24
         of this document stating: "*When displaying the virtual
         image in the most straight forward way each displayed
         pixel are chosen from the data base closest in angle to
         the direction of display of the three data bases. ...
         If the viewer looks straight south, data is only
         fetched from the data base recorded from north
         according to the example given above.*"

         However, the question of which image data to use for
         <u>rendering</u> a surface of a 3D model is different from
         reweighting disparity estimates which would lead to a
         modification of the <u>height</u> of the 3D model.

         Secondly, the board is not convinced that one
         particular published patent application constitutes
         sufficient proof of common general knowledge.

4.3.6   The appellant argued that the second passage of the
         description quoted in point 4.3.1 above indicated at
         least one way of carrying out the feature in question.
         In this passage it was disclosed that the reweighting
         could be based on obscuration using the normal vectors

of the 3D height model, such that an image taken from
above, for example, is used to estimate the roof
structure and not the sides of a building. The
appellant argued that the positions and attitudes for
at least one camera were recorded when the images used
in the claimed method were taken. Further, the normal
vectors of the estimated 3D height model inherently
contained information concerning which camera
positions/attitudes had an obscured line of sight
towards each point in the 3D height model. Hence, it
was clear from the second passage of the description
quoted in point 4.3.1 above that the normal vectors of
the estimated 3D height model were used in the
reweighting of the stereo disparity estimates to enable
the use of stereo disparities originating from image
pairs taken from obscured attitudes/positions to be
avoided in the reweighting to form a 3D model, given
that the positions and attitudes of the used images
were known (see letter dated 28 September 2023:
section I.1, paragraphs under the heading "Point 11.4
in the appealed decision", and point XI.(d) above).

The board is not convinced by this argument because it
is not apparent that the normal vectors of the
estimated 3D height model inherently contain
information concerning which camera positions/attitudes
have an obscured line of sight towards each point in
the 3D height model. Usually, this information is only
available once position and shape of any objects on a
line of sight between a point on the 3D model and a
camera position are known.

It may be assumed that the ensemble of normal vectors
of the 3D height model defines a surface of that height
model and that a particular point on that surface has
an obscured line of sight towards a camera taking

images. However, then it is not apparent how a
disparity estimate for that particular point on the 3D
model could have been created from image pairs taken by
the camera, namely because the view of that camera
towards the particular point on the 3D model had been
obscured.

4.4   In view of the above, the board finds that claim 1 of
        the main request does not meet the requirements of
        Article 83 EPC.

5.   First auxiliary request - admittance (Article 13(2)
        RPBA 2020)

5.1   The appellant argued that the first auxiliary request
        formed a basis for the appeal proceedings under
        Article 12(1)(d) RPBA 2020 because it had been
        submitted in reply to the board's communication (see
        point XI.(e) above).

        Article 12(1)(d) RPBA 2020 provides that appeal
        proceedings are based on any communication sent by the
        board and any answer thereto filed pursuant to
        directions of the board.

        The board is not convinced by the appellant's argument
        because Article 12(1)(d) RPBA 2020 states that those
        answers to communications from the board which are
        filed "*pursuant to directions of the board*" become a
        basis for the appeal proceedings.

        However, in its communication the board gave merely a
        preliminary opinion, namely that claim 1 of the main
        request and the auxiliary request then on file did not
        meet the requirements of Articles 83 and 84 EPC. In its
        preliminary opinion, the board did not "direct" the

appellant, i.e. did not give the appellant any
instructions, to file amendments.

Therefore, the board finds that it cannot be concluded
from Article 12(1)(d) RPBA 2020 that the first
auxiliary request forms a basis for the appeal
proceedings.

5.2   The first auxiliary request was filed after
        notification of the summons to oral proceedings. This
        auxiliary request is therefore an amendment within the
        meaning of Article 13(2) RPBA 2020.

5.3   Under Article 13(2) RPBA 2020, any amendment to a
        party's appeal case made after notification of a
        summons to oral proceedings is, in principle, not to be
        taken into account unless there are exceptional
        circumstances, which have been justified with cogent
        reasons.

        Article 13(2) RPBA 2020 imposes the most stringent
        limitations on appeal submissions made at an advanced
        stage of the proceedings (see Supplementary
        publication 2, OJ EPO 2020, Explanatory remarks on
        Article 13(2), first paragraph, second sentence).

        When exercising its discretion under Article 13(2)
        RPBA 2020, the board may also rely on criteria set out
        in Article 13(1) RPBA 2020 (see ibid., Explanatory
        remarks on Article 13(2), fourth paragraph).

        Under Article 13(1) RPBA 2020 the board is to exercise
        its discretion in view of, inter alia, whether the
        appellant has demonstrated that any such amendment,
        prima facie, overcomes the issues raised by the board.

5.4   Since claim 1 of auxiliary request 1 contains the same
        feature as objected to in point 4. above for the main
        request, it does not, prima facie, overcome the
        objection under Article 83 EPC raised by the board
        against claim 1 of the main request.

        In this respect, the appellant has not put forward any
        arguments beyond those already provided for the main
        request (see point XI.(f) above).

5.5   Therefore, the board exercised its discretion under
        Article 13(2) RPBA 2020, taking into account the
        criteria set out in Article 13(1) RPBA 2020, and
        decided not to admit the first auxiliary request into
        the appeal proceedings.

6.   Second auxiliary request - admittance (Article 13(2)
        RPBA 2020)

6.1   The appellant argued that the second auxiliary request
        formed a basis for the appeal proceedings under
        Article 12(1)(d) RPBA 2020 because it had been
        submitted in reply to the board's communication.

        The board is not convinced by this argument, for the
        same reasons as those given in point 5.1 above in
        relation to the first auxiliary request.

6.2   The second auxiliary request was filed after
        notification of the summons to oral proceedings. This
        auxiliary request is therefore an amendment within the
        meaning of Article 13(2) RPBA 2020.

6.3   As set out in point 5.3 above, the board may also rely
        on criteria set out in Article 13(1) RPBA 2020 when

exercising its discretion under Article 13(2)
RPBA 2020.

Under Article 13(1) RPBA 2020 the board is to exercise
its discretion in view of, inter alia, whether the
appellant has demonstrated that any such amendment,
prima facie, overcomes the issues raised by the board.

6.4   Claim 1 of the second auxiliary request was amended to
        specify "*the stereo disparity estimates are reweighted
        automatically and adaptively based on the normal
        vectors of the estimated 3D height model <u>taking
        obscuration into consideration, such that for example
        an image taken from above is used to estimate the roof
        structure and not the sides of a building</u>*".

6.5   As set out in point 4.3 above, the board is not
        convinced that taking obscuration into consideration
        explains how disparity estimates can be reweighted
        automatically and adaptively on the basis of the normal
        vectors.

        In this respect, the appellant has not put forward any
        other arguments than those already provided for the
        main request (see point XI.(f) above).

6.6   Hence, the board finds that the appellant has not
        demonstrated that the amendment to claim 1 of the
        second auxiliary request overcomes the objection under
        Article 83 EPC raised by the board.

6.7   Therefore, the board exercised its discretion under
        Article 13(2) RPBA 2020, taking into account the
        criteria set out in Article 13(1) RPBA 2020, and
        decided not to admit the second auxiliary request into
        the appeal proceedings.

7.   Conclusion

        The board decided not to remit the case to the
        department of first instance under Article 111(1) EPC
        and Article 11 RPBA 2020. Furthermore, the appellant's
        request for reimbursement of the appeal fee under
        Rule 103(1)(a) EPC is not granted. The main request is
        not allowable because claim 1 thereof does not meet the
        requirements of Article 83 EPC. The first and second
        auxiliary requests are not admitted into the appeal
        proceedings under Article 13 RPBA 2020. Since none of
        the appellant's requests is allowable, the appeal must
        be dismissed.

Order

For these reasons it is decided that:

1.   The appeal is dismissed.

2.   The request for reimbursement of the appeal fee is
        refused.

The Registrar: The Chair:

M. Schalow   B. Willems

Decision electronically authenticated