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

Datasheet for the decision of 9 August 2012

Case Number: T 2251/08 - 3.5.02

Application Number: 06717309.6

Publication Number: 1834312

IPC: G08B 13/196

Language of the proceedings: EN

Title of invention:
Systems and methods for night time surveillance

Applicant:
Opsigal Control Systems Ltd.

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 123(2)
EPC R. 103(1)(a)

Relevant legal provisions (EPC 1973):
-

Keyword:
"Novelty (no) main request, first auxiliary request"
"Inventive step (no) second auxiliary request"
"Amendments - added subject-matter (yes)"
"Reimbursement of the appeal fee (no)"

Decisions cited:
-

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 2251/08 - 3.5.02

D E C I S I O N
of the Technical Board of Appeal 3.5.02
of 9 August 2012

Appellant: Opsigal Control Systems Ltd.
21 Ha'Napach Street,
Industrial Area Karmiel
IL-21653 Karmiel (IL)

Representative: Virdee-Crofts, Kulwinder Kaur
Fisher Weiler Group
Portland House
Bressenden Place
London, SW1E 5RS (GB)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 4 July 2008 refusing European patent application No. 06717309.6 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: M. Ruggiu
Members: G. Flyng
P. Mühlens

Summary of Facts and Submissions

I. This appeal concerns the decision of the examining division refusing the European patent application number 06 717 309.6. In the contested decision the examining division held that the application did not meet the requirements of Article 123(2) EPC because it extended beyond the original disclosure.

In a section entitled *further comments* the examining division stated that even if the parts of claim 1 which were objected to under Article 123(2) EPC were to be removed, the application would not satisfy the requirements of Article 52(1) EPC because claim 1 of the application would not be new with respect to document D2 (US2003/0085992 A1).

II. With the statement of grounds of appeal (letter dated 3 November 2008), the appellant submitted amended claims according to a main request and first and second auxiliary requests.

The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or the first or second auxiliary requests filed with the letter dated 3 November 2008. Furthermore, the appellant requested reimbursement of the appeal fee.

III. The Board summoned the appellant to attend oral proceedings to be held on 9 August 2012. In an annex to the summons the Board set out the following preliminary observations on the appeal.

The Board tended to the view that in the independent claims of the main and first and second auxiliary requests the introduction of the feature "correlating (506) the live video image with the background image" offended Article 123(2) EPC.

Furthermore, the Board saw the wording "placing the current field of view of the camera (102,202) within the background image of the camera" in feature v) of the independent method claims as being problematic as there did not seem to be any support in the original application for this operation.

Regarding the first and second auxiliary requests the Board observed that the independent system claims 24 and B22 added fresh subject-matter.

The Board considered the objections in the contested decision that various of the dependent claims on file at that time introduced features which related to a different embodiment to the one covered by the preceding claims and that there was no indication in the original application to combine these different embodiments. The Board noted that it may be the case that different aspects of the invention were to some extent claimed separately and were referred to in the description as different "embodiments", but considered the question whether, taken as a whole, the application as filed directly and unambiguously disclosed these different aspects in combination with one another. It seemed to the board that taken as a whole the application as filed did directly and unambiguously disclose these different aspects of the invention in combination.

The Board considered the disclosure of document D2 and stated that it tended to the view that the subject-matter of the independent claims of the main request and first auxiliary request lacked novelty and the subject-matter of the independent claims of the second auxiliary request did not involve an inventive step.

Regarding the request for reimbursement of the appeal fee the Board noted that, in accordance with Rule 103(1)(a) EPC, a reimbursement of the appeal fee would only be possible in the case that the Board deemed that the appeal was allowable and the alleged procedural violation was substantial. The Board expressed doubts that this was the case.

IV. On 14 June 2012 the EPO received a fax from the appellant's representative which was a copy of the summons to oral proceedings bearing a stamp indicating that the representative had received the summons. The appellant did not file any further response to the summons to oral proceedings.

V. Oral proceedings were held before the Board on 9 August 2012 as scheduled. No one was present on behalf of the appellant. The appellant's representative had given no prior notification that this would be the case (cf. Rule 6 of the Code of Conduct of the Institute of Professional Representatives before the European Patent Office).

The Board took the present decision noting that:

– the appellant had requested in writing that the decision under appeal be set aside and that a

patent be granted on the basis of the main request, or on the basis of the first or second auxiliary requests, all filed with letter of 3 November 2008; and

– the appellant had requested reimbursement of the appeal fee.

VI. The independent claims of the various requests read as follows (paragraph references in square brackets have been removed by the board):

Main request: claim M1)

A method for use in a surveillance system (100) having a camera (102), comprising:

i) generating (502) a background image (302,402);

ii) receiving (504) a live video image (304,404) of the camera's current field of view;

iii) correlating (506) the live video image with the background image;

comprising:-

iv) using the camera (102) to generate (502) the background image (302,402) containing all or a portion of the camera's field of regard;

v) placing the current field of view of the camera (102,202) within the background image of the camera; and

vi) correlating (506) the position of the live image (304,404) within the background image.

Main request: claim M23)

A surveillance system, comprising:-

i) a camera (102) having a field of regard;

ii) a computer (150) capable of :-

a) generating (502) a background image (302,402),

b) receiving (504) a live video image (304,404) of a current field of view of the camera that is within the field of regard, and

c) correlating (506) the live video image with the background image;

wherein:-

iii) the current field of view of the camera (102) is within the background image (302,402) of the camera (102); and

iv) the computer (150) is capable of:-

a) using the camera to generate (502) the background image (302,402) containing all or a portion of the camera's field of regard; and

b) correlating (506) a position of the live video image (304,404) within the background image.

First auxiliary request: Claim 1)

A method for use in a surveillance system (100) having a camera (102), comprising:

i) generating (502) a background image (302,402) of the camera's field of regard;

ii) receiving (504) a live video image (304,404) of the camera's current field of view;

iii) correlating (506) the live video image with the background image;

characterized by:-

iv) using the camera to generate (502) the background image (302,402) containing all or a portion of the camera's field of regard;

v) placing the current field of view of the camera (102,202) within the background image of the camera; and

vi) correlating (506) the position of the live image within the background image by:-

a) displaying a position indicator (308) for the live video image (304) on the background image (302); or

b) fusing the live video image (404) on the background image (402) in its relative position.

First auxiliary request: Claim 24)

A surveillance system, comprising:-

i) a camera (102) having a field of regard;

ii) a computer (150) capable of:-

a) generating (502) a background image (302,402) of the field of regard,

b) receiving (504) a live video image (304,404) of a current field of view of the camera that is within the field of regard, and

c) correlating (506) the live video image with the background image;

characterized in that:-

iii) the current field of view of the camera (102) is within the background image of the camera; and

iv) the computer (150) is capable of correlating (506) a position of the live video image within the background image by:-

a) using the camera to generate (502) the background image (302,402) containing all or a portion of the camera's field of regard;

b) displaying a position indicator (308) for the live video image (304) on the background image (302); or

c) fusing the live video image(404) on the background image (402) in its relative position.

Second auxiliary request: Claim B1)

A method for use in a surveillance system (100) having a camera (102), comprising:

i) generating (502) a background image (302,402) of the camera's field of regard;

ii) receiving (504) a live video image (304,404) of the camera's current field of view;

iii) correlating (506) the live video image with the background image;

comprising:-

iv) using the camera to generate (502) the background image (302,402) containing all or a portion of the camera's field of regard;

v) placing the current field of view of the camera (102,202) within the background image of the camera;

vi) correlating (506) the position of the live image within the background image by:-

a) displaying a position indicator (308) for the live video image (304) on the background image (302); or

b) fusing the live video image (404) on the background image (402) in its relative position;

vii) scanning the field of regard based on based on *[sic]* areas of interest (AOI) position information corresponding to a position of at least one AOI in the field of regard; and

ix) receiving a live video image of the camera's current field of view covering the at least one AOI.

Second auxiliary request: Claim B22)

A surveillance system, comprising:-

i) a camera (102) having a field of regard;

ii) a computer (150) capable of:-

a) generating (502) a background image (302,402) of the field of regard,

b) receiving (504) a live video image (304,404) of a current field of view of the camera that is within the field of regard, and

c) correlating (506) the live video image with the background image;

wherein:-

iii) the current field of view of the camera (102) is within the background image of the camera; and

iv) the computer (150) is capable of correlating (506) a position of the live video image within the background image by:-

a) using the camera to generate (502) the background image (302,402) containing all or a portion of the camera's field of regard;

b) displaying a position indicator (308) for the live video image (304) on the background image (302); or

c) fusing the live video image (404) on the background image (402) in its relative position;

d) scanning the field of regard based on based on *[sic]* areas of interest (AOI) position information corresponding to a position of at least one AOI in the field of regard; and

e) receiving a live video image of the camera's current field of view covering the at least one AOI.

Reasons for the Decision

1. The appeal is admissible.

2. **Amendments, Article 123(2) EPC**

2.1 Independent claims 1, 16 and 25 as originally filed specified "correlating a position of the live video image within the background image", whereas the independent claims of all present requests specify both this feature and also the feature "correlating (506) the live video image with the background image". The Board considers this latter feature to be somewhat different as it might cover correlating aspects of the live video image other than its position within the background image (e.g. timing or picture quality). However, in the application as filed there is no basis for correlating anything other than the position of the live video image within the background image.

When this different feature was first introduced into the preamble of the claims, it may have been the applicant's intention for this to indicate what was known from the prior art, with the original narrower wording retained in the characterising portion limiting the scope of the broader feature to that of the invention. However, the wording of the claims does not suggest that the narrower feature of correlating the position of the live video image within the background image should limit the broader feature of correlating the live video image with the background image. Hence, the Board finds that the introduction of the broader feature offends Article 123(2) EPC.

2.2 The independent method claims of all present requests specify in feature v) "placing the current field of view of the camera (102,202) within the background image of the camera". This wording is problematic as there is no support in the original application for such an operation. Hence, the Board finds that the introduction of this feature offends Article 123(2) EPC.

2.3 The independent system claims of the first and second auxiliary requests (claims 24 and B22) specify in feature iv) that the computer is capable of correlating a position of the live video image within the background image by feature a); b); or c). With this wording, features a), b) and c) are presented as alternatives. However, feature a) relates not to the manner in which the correlation of the position of the live video image is performed, but to the generation of the background image. By suggesting that the correlation can be performed just by generating the background image, claims 24 and B22 add fresh subject-matter, contrary to Article 123(2) EPC.

3. **Novelty and inventive step, Article 54 and 56 EPC**

3.1 In a section of the grounds for the decision entitled "Further Comments" the examining division took the view that claims 1 and 24 lacked novelty with respect to document D2 (US 2003/0085992 A1).

3.2 Document D2 discloses in paragraph [0012] a surveillance system comprising a plurality of cameras supplying video and an image processor for applying the videos to a three dimensional (3D) model of the scene.

Figure 3 shows a flow diagram of the process by which the system operates. According to the accompanying description (see paragraph [0031]):

- At step 302, input imagery from the cameras is coupled to the image processor.
- At step 304, the user selects a view of the scene and that view information is coupled to step 306 where the model is generated that depicts the model as viewed from the location selected in the view selection step 304.
- The overall model of the scene is apriori rendered using various well-known modeling techniques.

The way in which the overall 3D model is produced is described in the lower part of paragraph [0031] and paragraphs [0032] to [0034]. In essence a technician starts with an outline of a building encoded in 3D digital format, marks the location and parameters of each camera on the outline model, and then models the planar surfaces of the outline model using captured imagery and knowledge of the 3D shape of the scene. Specifically, the technician loads a single image from each camera view into a display. The technician then selects a set of points in the image that define the boundaries of a single planar surface in the scene, such as a wall (see paragraph [0033]). Additionally, according to paragraph [0034] "texture may be mapped onto the 3D model such that the walls and floors and other objects within the scene that are not draped with video during the rendering process have apparent texture to the user."

As described in paragraph [0031], at step 306 the model is generated that depicts the [overall] model as viewed

from the location selected in the view selection step 304.

In the light of the above disclosures the Board considers that either the overall 3D model or the model as viewed from the selected location (generated at step 306) can be considered as a background image containing all or a portion of the camera's field of regard within the meaning of the present invention. Furthermore, the model is generated using the camera(s).

According to paragraph [0035] of D2, at "step 308, the model from the selected viewpoint and the input imagery are combined to render a view of the scene as directed by the security guard". Furthermore, "the video from each camera is aligned to the model and warped into position. The warped video from each camera is applied to the model and merged to form the contextual view of the scene. In this manner, the hallway structure of scene 100 will contain walls represented with video imagery from the cameras."

Similarly, paragraph [0029] states that once the view of the model is generated, "the model is coupled to the image rendering processor where the various video images from the cameras are warped into alignment with the model and rendered upon or draped upon the model".

In the Boards judgement, these disclosures amount to the same thing as correlating the position of the live video image within the background image by fusing the live video image on the background image in its relative position within the meaning of the present invention.

Considering the second auxiliary request and in particular the claimed features of scanning the field of regard based on based on areas of interest (AOI) position information corresponding to a position of at least one AOI in the field of regard, and receiving a live video image of the camera's current field of view covering the at least one AOI, the Board notes that D2 discloses the possible use of pan/tilt/zoom video cameras (see in particular paragraph [0037]). Given that such cameras are present in D2 it would be rather obvious to point them towards various areas of interest of the building that are covered by the 3D model.

Hence, the Board finds that the subject-matter of the independent claims of the main request and first auxiliary request lacks novelty (Article 54 EPC) and the subject-matter of the independent claims of the second auxiliary request does not involve an inventive step (Article 56 EPC).

4. Conclusion

The appellant has not submitted any arguments that deal with the above reasons, which the Board discussed in the annex to the summons to oral proceedings. For these reasons, none of the appellant's requests can form a basis for the grant of the patent. Hence, the appeal has to be dismissed.

5. **Reimbursement of the appeal fee**

In accordance with Rule 103(1)(a) EPC, reimbursement of the appeal fee is only possible if the Board deems the appeal to be allowable. For the reasons set out above that is not the case. Hence, the request for reimbursement of the appeal fee has to be refused.

Order

For the above reasons it is decided that:

1. The appeal is dismissed.

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

The Registrar: The Chairman:

U. Bultmann M. Ruggiu