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**Datasheet for the decision
of 27 June 2024**

Case Number: T 0869/22 - 3.5.04

Application Number: 17193384.9

Publication Number: 3462411

IPC: G06T7/00, G06Q10/00, G06Q10/06

Language of the proceedings: EN

Title of invention:
CONFIGURATION TOOL AND METHOD FOR A QUALITY CONTROL SYSTEM

Applicant:
Arkite NV

Headword:

Relevant legal provisions:
EPC Art. 111(1)
RPBA 2020 Art. 11
EPC R. 103

Keyword:
Remittal - special reasons for remittal
Reimbursement of appeal fee - (no)

Decisions cited:

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

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Case Number: T 0869/22 - 3.5.04

D E C I S I O N
of Technical Board of Appeal 3.5.04
of 27 June 2024

Appellant: Arkite NV
(Applicant) C-Mine 12
3600 GENK (BE)

Representative: IP HILLS NV
Bellevue 5/501
9050 Gent-Ledeberg (BE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 12 November 2021 refusing European patent application No. 17193384.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair B. Willems
Members: B. Le Guen
G. Decker

Summary of Facts and Submissions

- I. The appeal is against the decision to refuse European patent application No. 17 193 384.9.
- II. The prior-art documents cited in the decision included the following:
 - D1: EP 3 136 314 A1
 - D2: A. Rosebrock, "*Basic motion detection and tracking with Python and OpenCV*", 29 May 2015, retrieved on 17 November 2017 from <<https://web.archive.org/web/20150529002031/https://www.pyimagesearch.com/2015/05/25/basic-motion-detection-and-tracking-with-python-and-opencv/>>, XP055426126
- III. The decision under appeal was based on the grounds that the subject-matter of claim 1 of the main request and the first and second auxiliary requests then on file did not involve an inventive step within the meaning of Article 56 EPC in view of the combined disclosures of documents D1 and D2 and the common general knowledge of the person skilled in the art.
- IV. The applicant (appellant) filed notice of appeal. With the statement of grounds of appeal, the appellant re-filed the claims of the main request and the first and second auxiliary requests on which the decision under appeal was based and provided arguments as to why the claimed subject-matter involved an inventive step.

- V. The appellant was summoned to oral proceedings. In a communication under Article 15(1) RPBA (see OJ EPO 2024, A15), the board gave its preliminary opinion that the decision under appeal could not stand and that special reasons presented themselves for remitting the case to the examining division for further prosecution. If the appellant agreed to this remittal, the board intended to cancel the oral proceedings.
- VI. By letter dated 12 June 2024, the appellant agreed with the remittal of the case to the examining division for further prosecution and the cancellation of the oral proceedings. The appellant also requested "*[r]eimbursement of the appeal fee in full or partial as deemed appropriate under Rule 103 EPC*".
- VII. The scheduled oral proceedings were cancelled.
- VIII. The appellant requests that the decision under appeal be set aside and 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, the claims of either the first or second auxiliary request filed with the statement of grounds of appeal. Furthermore, the appellant requests reimbursement of the appeal fee in full or in part "*as deemed appropriate under Rule 103 EPC*".
- IX. Claim 1 of the main request reads as follows:
- "A configuration tool (100) adapted to configure a quality control system to monitor and/or guide an operator in a working environment (104) through recognition of objects, events or an operational process, said configuration tool comprising:*

A. a volumetric sensor (101) adapted to capture volumetric image frames of said working environment (104) while an object, event or operational process is demonstrated;

B. a display (103), coupled to said volumetric sensor (101) and configured to live display said volumetric image frames; and

C. a processor (102) configured to:

C1. generate a user interface in overlay of said volumetric image frames to enable a user to define a layout zone (131);

C2. automatically generate a virtual box (133, 134) in said layout zone (131) when an object, event or operational process is detected during demonstration of said object, event or operational process; and

C3. select a precision parameter for said virtual box (133, 134) to be used to detect presence/absence of an object or event in said virtual box, said precision parameter being one of:

- a fill level;
- an occlusion level;
- a standard deviation; or
- another parameter describing a change in a virtual box,

wherein the parameter with highest difference between subsequent volumetric image frames during demonstration of said operational process is selected as precision parameter."

Reasons for the Decision

1. The appeal is admissible.

A. The application

2. The application relates to the configuration of a quality control system used for monitoring an operator in a working environment through recognition of objects, events or an operational process. Such a system is disclosed in document D1, this system of D1 being summarised in paragraph [02] of the application as filed. It relies on data received from a volumetric sensor to detect physical objects or operational actions in so-called volume objects representing "voluminous spaces" within the physical working area (see paragraphs [0021] and [0096] to [0098] of document D1). The presence or absence of a physical object or an operational action in a volume object is translated into an event by the quality control system, and the event is validated in view of a predetermined workflow sequence (*ibid.*).

3. The volume objects disclosed in document D1, also called virtual boxes in paragraphs [02] and [03] of the current application as filed, must be manually defined by a technician. To save time, the application in hand proposes solutions for (semi-)automatically configuring the virtual boxes. During a demonstration of an operational process, images captured by a volumetric sensor are analysed to determine the presence of objects or events and to select the parameters of one or more virtual boxes, including location, size and a so-called precision parameter (e.g. a fill level or an occlusion level) to be used for detecting the presence or absence of an object or event in the virtual box.

The user is only requested to identify the relevant part of the space by identifying a layout zone (e.g. a rectangle) in a user interface displayed in overlay of the captured volumetric images (see paragraph [06] of the application as filed).

B. The examining division's reading of claim 1

4. In point 1.2 of the decision under appeal, the examining division considered that the layout zone specified in feature C1 of claim 1 (see point IX. above) could be equated to the "*voluminous spaces or objects*" (i.e. the volume objects) disclosed in document D1. In point 1.1 of the decision under appeal, the examining division also held that paragraphs [0033] to [0042] of document D1 disclosed selecting a precision parameter for a virtual box to be used to detect the presence or absence of an object or event in this virtual box. Since paragraphs [0033] to [0042] of document D1 specify properties of a volume object, the examining division thus equated the volume object of D1 to the virtual box of claim 1.
5. The examining division's reading of claim 1 of the requests in hand does not withstand scrutiny. According to feature C2, a virtual box is automatically generated in the (previously defined) layout zone. Therefore, the volume objects disclosed in document D1 cannot be equated to both the layout zone and the virtual boxes automatically generated within the previously defined layout zone.
6. The description clearly maps the virtual boxes with the volume objects disclosed in D1 (see section A. above). The board is not persuaded that claim 1 of the requests in hand leaves room for another interpretation.

Feature C3 specifies a precision parameter to be used to detect the presence or absence of an object or event in the virtual box. Therefore, it is clear that the virtual box represents a space in which an event or object can be detected to be present or not, not (or not merely) a bounding box that can be displayed to draw the user's attention to an area in which an object was detected (see point 1.7.1 of the decision under appeal).

7. In view of the above, the board finds that the decision under appeal cannot stand.

C. Remittal of the case to the first-instance department

8. Pursuant to 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, "*the Board shall not remit a case to the department whose decision was appealed for further prosecution, unless special reasons present themselves for doing so*".
9. It is clear from the description of the application as filed that the invention relates to the (semi-)automatic configuration of the volume objects of the quality control system disclosed in document D1, these volume objects having been renamed virtual boxes in the application in hand (see section A. above). Although updating of volume objects is disclosed in general terms in document D1 (see paragraph [0091]), D1 is mainly directed at the use of a pre-configured system for actual quality control (see also points 2.6 and 2.22 of the statement of grounds of appeal). In

contrast, the application in hand is directed at the configuration of that system.

10. Document D1, cited in paragraph [02] of the application as filed, is a previous patent application of the appellant. The other three documents cited in the European search report all relate to object detection and tracking in two-dimensional images, not the configuration of a quality control system or the detection of an object, event or operation process within a virtual box/volume object representing a "voluminous space" within a working area.
11. In view of points 5. and 10. above, the board has doubts that the invention was searched with due regard to the description and drawings (see Article 92 EPC). If the board itself were to decide on the substance of the case and not remit the case to the department of first instance, the board would have to carry out an additional search taking into account core aspects of the claimed invention. This is primarily the task of the examining division. Therefore, the board finds that special reasons present themselves for remitting the case to the examining division for further prosecution.

D. No reimbursement of the appeal fee

12. The appellant requested reimbursement of the appeal fee in full or in part "*as deemed appropriate under Rule 103 EPC*". However, for the following reasons, the board does not consider it appropriate to order a reimbursement of the appeal fee, in full or in part, under any of the paragraphs of Rule 103 EPC.
13. Rule 103(1), (2), (3), (4) (a) and 4(b) EPC obviously do not apply since no substantial procedural violation in

the first-instance proceedings has been established (Rule 103(1) (a) EPC) and the appeal has not been withdrawn (Rule 103(2), (3), (4) (a) and 4(b) EPC).

14. Under Rule 103(4) (c) EPC, the appeal fee is reimbursed at 25% if any request for oral proceedings is withdrawn within one month of notification of the communication issued by the board in preparation for the oral proceedings, and no oral proceedings take place. In this regard, the board notes the following. In its statement of grounds of appeal, the appellant requested that "*oral proceedings are organised should the Board of Appeal be of the opinion that European Patent application [...] should remain refused*" (see statement of grounds of appeal, page 1). Summons to oral proceedings were issued before the board's communication under Article 15(1) RPBA. Since the board was of the preliminary view that the decision under appeal could not stand, the condition for the appellant's request to become operational was not fulfilled. The board nonetheless maintained the oral proceedings as a precautionary measure should the appellant disagree with the remittal of the case to the examining division for further prosecution. However, no operational request for oral proceedings was on file that could have been withdrawn by the appellant. Therefore, the conditions of Rule 103(4) (c) EPC cannot be met.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the examining division for further prosecution.

The Registrar:

The Chair:



K. Boelicke

B. Willems

Decision electronically authenticated