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**Datasheet for the decision  
of 16 March 2022**

**Case Number:** T 1329/17 - 3.5.04

**Application Number:** 12801706.8

**Publication Number:** 2803202

**IPC:** H04N21/454, H04N21/4545,  
H04N21/84, G06K9/00

**Language of the proceedings:** EN

**Title of invention:**

METHOD OF PROCESSING VIDEO DATA, DEVICE, COMPUTER PROGRAM  
PRODUCT, AND DATA CONSTRUCT

**Applicant:**

Unify Patente GmbH & Co. KG

**Headword:**

**Relevant legal provisions:**

EPC Art. 83, 84, 111(1), 123(2)  
RPBA 2020 Art. 11, 13(1), 13(2)

**Keyword:**

Amendment after summons - exceptional circumstances (yes)

Amendments - added subject-matter (no)

Sufficiency of disclosure - (yes)

Claims - clarity (yes) - support in the description (yes)

Remittal - (yes)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

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Case Number: T 1329/17 - 3.5.04

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.04**  
**of 16 March 2022**

**Appellant:** Unify Patente GmbH & Co. KG  
(Applicant) Otto-Hahn-Ring 6  
81739 München (DE)

**Representative:** Murgitroyd & Company  
Murgitroyd House  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 20 January 2017  
refusing European patent application  
No. 12801706.8 under Article 97(2) EPC.**

**Composition of the Board:**

**Chair** B. Willems  
**Members:** A. Seeger  
T. Karamanli

## Summary of Facts and Submissions

I. The appeal is against the examining division's decision to refuse European patent application No. 12 801 706.8, published as international patent application WO 2014/090262 A1.

II. The prior-art documents cited in the decision under appeal included:

D1: T. Endeshaw et. al.: "*Classification of Indecent Videos by Low Complexity Repetitive Motion Detection*", 37th IEEE Applied Imagery Pattern Recognition Workshop, 2008, pages 1 to 7, doi: 10.1109/AIPR.2008.4906438, XP 031451786

D2: US 2011/0161999 A1

D3: N. Rea et al.: "*Multimodal Periodicity Analysis for Illicit Content Detection in Videos*", 3rd European Conference on Visual Media Production, 2006, pages 106 to 114, doi: 10.1049/cp:20061978, XP 002541426

D4: WO 2009/144330 A1

III. The decision under appeal was based on the grounds that claim 1 of all requests then on file did not meet the requirements of Articles 83 and 84 EPC.

IV. The applicant (appellant) filed notice of appeal. With the statement of grounds of appeal, it filed claims according to a main request and first to third auxiliary requests. According to the appellant, the claims of this main request corresponded to the claims of the main request on which the decision under appeal

was based. The appellant requested 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 or, alternatively, on the basis of the claims of one of the first to third auxiliary requests. It provided arguments why the claims met the requirements of Articles 83 and 84 EPC and their subject-matter involved an inventive step within the meaning of Article 56 EPC.

V. A summons to oral proceedings and a communication under Article 15(1) of the Rules of Procedure of the Boards of Appeal in the 2020 version (RPBA 2020, see OJ EPO 2019, A63) were issued. In this communication, the board stated that it was not convinced by the objections raised by the examining division under Articles 83 and 84 EPC and expressed its preliminary opinion that claim 1 of none of the requests then on file was supported by the description (Article 84 EPC). In particular, the board objected that claim 1 of none of the requests specified the following conditions which the description set out as necessary for solving the technical problem with which the application was concerned.

(a) A scanning field of the scanning device covered at least an image capturing field of the camera (see description, page 15, lines 9 and 10).

(b) The relative positions of the camera and the scanning device were known so that location parameters stemming from the step of detecting undesired expressions could be transformed into image coordinates in an image stemming from the camera (see description, page 17, lines 21 to 25 and page 30, lines 18 to 24).

- VI. By letter of reply dated 15 February 2022, a newly appointed representative requested that the oral proceedings be delayed to allow familiarisation with the case or in the *"unlikely event that Oral Proceedings [were] to be maintained ... [they] could be provided with the requisite VICO connection details"*. The appellant filed a replacement set of claims and requested that these claims be *"entered into proceedings to replace all requests currently on file"*. The appellant also stated: *"If admitted into proceedings, the replacement claims would become the sole request of the Applicant with all other requests withdrawn."* The appellant also provided reasons why the newly filed request should be admitted into the proceedings. It indicated a basis in the application as filed for the amendments and provided arguments why the newly filed request met the requirements of Article 84 EPC.
- VII. With a communication dated 16 February 2022, the board informed the appellant that it did not grant the request for a change of the date of oral proceedings but that it did grant the request to hold the oral proceedings by videoconference.
- VIII. Oral proceedings before the board took place on 16 March 2022.

During the oral proceedings, the appellant filed a set of claims labelled *"Claims Submitted Appeal Board Hearing 16<sup>th</sup> March 2022 at 13:25"*. The appellant made this set of claims its sole request and withdrew all other requests on file.

The appellant's final request was that the decision under appeal be set aside and that the case be remitted to the examining division for further prosecution.

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

IX. The independent claims of the sole request read as follows:

"1. A method using a camera (112), and a motion and gesture recognition technology comprising a scanning device (114) with a CCD sensor and an RGB camera, where the scanning field of the scanning device (114) at least covers an imaging field of the camera (112),

the method processing unprocessed video data into processed video data, said unprocessed video data being provided by the camera (112) to pick up sequential images of a situation or scene,

the method including the initialisation step of: determining the relative positions of the camera (112) and the scanning device (114) based on image data from the camera (112) and the RGB camera as well as sensor data from the CCD sensor;

and the method further comprising the steps of:

- applying motion and gesture recognition using the motion and gesture recognition technology in real time to said situation or scene to identify an inappropriate body expression such as obscene gestures or indecent exposures carried out by a person;

- identifying undesirable image contents contained in said unprocessed video data, based on a result of said motion and gesture recognition, wherein the relative positions of the camera (112) and the scanning device (114) determined from the initialisation step allow location parameters stemming from the step of identifying an inappropriate body expression to be transformed into image coordinates in an image stemming from the camera (112), and providing content information relating to any identified undesirable image contents; and
- using said content information to produce said processed video data;

characterized by the steps of:

- identifying indicators in said situation or scene which increase the likelihood of undesirable image contents to be contained in said unprocessed video data in the future, based on recognized motions and gestures, and providing an information on said indicators, wherein the identification of the indicators includes comparing parameters acquired by said motion and gesture recognition technology with predefined parameters stored in a database (208) and wherein the parameters describe predefined alerting gestures and/or movements which bear a raised potential that a person is going to perform inappropriate body expressions, obscene gestures or indecent exposures; and
- adapting said motion and gesture recognition by using information on said identified indicators, wherein said adapting step includes setting an alert state in which a scanning rate is increased, and/or a scanning resolution is increased, at least



in an area of the scanning field of the scanning device in which an obscene gesture or indecent exposure is expected, and/or a data processing cycle for motion and gesture recognition is accelerated.

10. A system (100) comprising a camera (112), and a motion and gesture recognition technology comprising a scanning device (114) with a CCD sensor and an RGB camera, where the scanning field of the scanning device (114) at least covers an imaging field of the camera (112), the system being configured to perform the method of any one of claims 1 to 9.

11. Computer program product comprising code means being adapted to implement a method of any of claims 1 to 9 when run on a processing means, module, unit, or device, said code means preferably being stored on or included in a data carrier."

X. The examining division's arguments, in so far as they are relevant to the present decision, may be summarised as follows.

(a) The following features of claim 1 according to the main request then on file were not disclosed in the application in a manner sufficiently clear and complete for them to be carried out by the skilled person, contrary to Article 83 EPC:

"identifying indicators in said situation or scene which increase the likelihood of undesirable image contents to be contained in said unprocessed video data in the future, based on recognized motions and

gestures, and providing an information on said indicators, wherein the identification of the indicators includes comparing parameters acquired by said gesture recognition technology with predefined parameters stored in a database and wherein the parameters describe predefined alerting gestures and/or movements which bear a raised potential that a person is going to perform inappropriate body expressions, obscene gestures or indecent exposures" (emphasis as added by the examining division, see decision under appeal, point 4.1)

- (b) To implement these features, the following three steps were needed:
- determine the reference patterns
  - obtain an estimate of the likelihood that undesirable image content will be present
  - process such an estimated likelihood value

These steps were complex and not disclosed in the application. Furthermore, additional information such as the cultural background of the content was of paramount importance to predict what would happen in the image (see decision under appeal, point 4.3).

- (c) Predicting that a person appearing in a video image would perform inappropriate body expressions would have required the skilled person to supplement the information contained in the application with more than just common general knowledge. To achieve such a goal, the skilled person would have needed to apply "*inventive effort and undue burden*" (see decision under appeal, point 4.6).

(d) Since the application did not disclose the features of claim 1 quoted under point X.(a) above in a manner sufficiently clear and complete for them to be carried out by the skilled person, it followed that these features had been drafted as a desideratum, i.e. as a result to be achieved. Claim 1 thus contravened Article 84 EPC (see decision under appeal, point 6).

### **Reasons for the Decision**

1. The appeal is admissible.
2. Sole request - admittance (Article 13 RPBA 2020)
  - 2.1 The sole request was filed during the oral proceedings before the board, i.e. after notification of the summons to oral proceedings. The sole request is therefore an amendment within the meaning of Article 13(2) RPBA 2020.
  - 2.2 In the communication under Article 15(1) RPBA 2020, the board raised a new objection of lack of support (see point V. above). In response to this new objection and to further objections raised during the oral proceedings before the board, the appellant filed the sole request with the aim of overcoming these objections. This represents an exceptional circumstance within the meaning of Article 13(2) RPBA 2020.
  - 2.3 Furthermore, the appellant demonstrated that the claims of the sole request, prima facie, overcame the objections raised by the board and did not give rise to new objections (see sections 3. and 6. below).

2.4 Hence, the board exercised its discretion under Article 13(2) RPBA 2020, taking the further criteria of Article 13(1) RPBA 2020 into account, and decided to admit the sole request into the appeal proceedings.

3. Sole request - added subject-matter  
(Article 123(2) EPC)

3.1 Claim 1 of the sole request is based on claims 1 and 8 as originally filed.

Furthermore, the feature of claim 1 "*a camera (112)*" is based on the description as originally filed, page 14, line 10.

The feature of claim 1 "*a motion and gesture recognition technology comprising a scanning device (114) with a CCD sensor and an RGB camera*" is based on the description as originally filed, page 14, lines 29 to 32 and page 15, lines 12 to 15.

The feature of claim 1 "*where the scanning field of the scanning device (114) at least covers an imaging field of the camera (112)*" is based on the description as originally filed, page 15, lines 9 and 10.

The feature of claim 1 "*the method including the initialisation step of: determining the relative positions of the camera (112) and the scanning device (114) based on image data from the camera (112) and the RGB camera as well as sensor data from the CCD sensor*" is based on the description as originally filed, page 15, line 33 to page 16, line 8.

The feature of claim 1 "*using the motion and gesture recognition technology ... to identify an inappropriate*

*body expression such as obscene gestures or incident exposures carried out by a person*" is based on the description as originally filed page 17, lines 1 and 2 as well as claim 1 as originally filed, lines 11 and 12.

The feature of claim 1 *"wherein the relative positions of the camera (112) and the scanning device (114) determined from the initialisation step allow location parameters stemming from the step of identifying an inappropriate body expression to be transformed into image coordinates in an image stemming from the camera (112)"* is based on the description as originally filed, page 17, lines 21 to 25.

The feature of claim 1 *"wherein the identification of the indicators includes comparing parameters acquired by said motion and gesture recognition technology with predefined parameters stored in a database (208) and wherein the parameters describe predefined alerting gestures and/or movements which bear a raised potential that a person is going to perform inappropriate body expressions, obscene gestures or indecent exposures"* is based on the description as originally filed, page 8, lines 12 to 16.

The feature of claim 1 *"a scanning resolution is increased, at least in an area of the scanning field of the scanning device"* is based on the description as originally filed, page 23, lines 13 to 16.

- 3.2 Claim 10 of the sole request defines a system. This is based on the description page 15, line 33 mentioning a "system". Otherwise, the same basis in the application as filed as for claim 1 applies.

- 3.3 Claim 11 of the sole request is based on claim 13 as originally filed.
- 3.4 Dependent claims 2 to 9 of the sole request are based on original claims 2 to 7, 10 and 11, respectively.
- 3.5 In view of the above, the claims of the sole request do not contain subject-matter which extends beyond the content of the application as filed. The requirements of Article 123(2) EPC are thus met.

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

- 4.1 The examining division found that the following features of claim 1 according to the main request then on file were not disclosed in the application in a manner sufficiently clear and complete for them to be carried out by the person skilled in the art, contrary to Article 83 EPC:

"identifying indicators in said situation or scene which increase the likelihood of undesirable image contents to be contained in said unprocessed video data in the future, based on recognized motions and gestures, and providing an information on said indicators, wherein the identification of the indicators includes comparing parameters acquired by said gesture recognition technology with predefined parameters stored in a database and wherein the parameters describe predefined alerting gestures and/or movements which bear a raised potential that a person is going to perform inappropriate body expressions, obscene gestures or indecent exposures" (see point X.(a) above)

Features identical to the ones quoted above are contained in claim 1 of the sole request.

- 4.2 The examining division took the view that to implement these features, the following three steps were needed:
- (a) determine the reference patterns
  - (b) obtain an estimate of the likelihood that undesirable image content will be present
  - (c) process such an estimated likelihood value

These steps were complex and not disclosed in the application. Furthermore, additional information such as the cultural background of the content were of paramount importance to predict what would happen in the image (see point X.(b)).

- 4.3 The board is not convinced that the application does not disclose how to determine the reference patterns. In fact, the application contains examples of gestures that make further indecent gestures more probable. These examples are set out on page 15, lines 24 to 27 and page 21, lines 24 to 26.

Furthermore, the board notes that the claimed subject-matter does not require identification of all indicators which increase the likelihood of undesirable image content being contained in the unprocessed video data in the future. Identification of all such indicators would indeed require an understanding of the cultural background. However, claim 1 only specifies "*identifying indicators*", i.e. at least two individual indicators.

Finally, the board is not convinced that an estimate is required of how likely undesirable image content is to occur after a certain motion or gesture is recognised.

Implementing the feature of claim 1 "*identifying indicators in said situation or scene which increase the likelihood of undesirable image contents*" only requires a binary decision such that an indicator either increases or does not increase the likelihood. Exact calculation and further processing of this likelihood is not required.

- 4.4 The board is not convinced that claim 1 requires predicting that a person appearing in a video image will perform inappropriate body expressions in the sense of a prediction of what will happen in the future. The board finds that claim 1 only requires recognising motions or gestures of a person and comparing these with "*alerting expressions*" stored in a database (see description page 21, lines 24 to 30). To do this, the person skilled in the art would not need to apply "*inventive effort and undue burden*" (see point X.(c) above).
- 4.5 In view of the above, the board finds that the application discloses the invention in a manner sufficiently clear and complete for it to be carried out by the person skilled in the art. The requirements of Article 83 EPC are thus met.
5. Sole request - clarity (Article 84 EPC)
- 5.1 Contrary to the examining division's opinion, the board considers the features quoted under point 4.1 to be disclosed in a manner sufficiently clear and complete for them to be carried out by the person skilled in the art (see section 4. above). Therefore, the board is also not convinced by the examining division's argument that these features were formulated as a desideratum,



i.e. as a result to be achieved, and that claim 1 thus did not meet the requirements of Article 84 EPC (see point X.(d) above).

5.2 Furthermore, the board sees no other objection of lack of clarity which applies to the set of claims of the sole request.

6. Sole request - support by the description  
(Article 84 EPC)

6.1 The board is satisfied that after amendment claim 1 specifies the essential features for solving the technical problem with which the application is concerned.

Namely, claim 1 specifies the following features.

(a) The scanning field of the scanning device at least covers an imaging field of the camera (see claim 1, lines 7 and 8).

(b) The relative positions of the camera and the scanning device determined from the initialisation step allow location parameters stemming from the step of detecting an inappropriate body expression to be transformed into image coordinates in an image stemming from the camera (see claim 1, lines 23 to 27).

6.2 Hence, the objection of lack of support as raised by the board in its communication under Article 15(1) RPBA 2020 no longer applies (see point V. above).

6.3 Therefore, claim 1 is supported by the description as required by Article 84 EPC.

- 6.4 The same applies to claims 10 and 11 defining a corresponding system and computer program product, respectively, as well as to dependent claims 2 to 9.
7. Remittal (Article 111(1) EPC and Article 11 RPBA 2020)
- 7.1 The decision under appeal was only based on the grounds of lack of clarity and lack of disclosure of the invention of the claims then on file. These grounds for refusal do not apply to the set of claims according to the current sole request.
- 7.2 However, a patent cannot be granted without the application first being examined for compliance with the other requirements of the Convention such as inventive step (Article 56 EPC) in view of the available prior-art documents.
- 7.3 The examining division has not yet carried out such an examination for the subject-matter of the claims according to the current sole request.
- 7.4 The board does not consider it appropriate at this stage of the appeal proceedings to examine the amended claims itself for the following reasons.
- (a) The claimed subject-matter has significantly changed with respect to the subject-matter on which the decision under appeal was based.
  - (b) The prior-art documents cited in the decision under appeal (see point II. above) all disclose methods in which video content itself, as captured by a camera and subsequently encoded, is analysed to determine whether this content is indecent. In

contrast, the claims according to the sole request specify that inappropriate body expressions are identified by a scanning device. Only after the location parameters stemming from the step of identifying inappropriate body expressions are determined are they transformed into image coordinates in an image. Therefore, the board is not convinced that any of the prior-art documents cited in the decision under appeal is an appropriate starting point for the assessment of inventive step of the claimed subject-matter.

(c) The appellant requested that the case be remitted to the examining division for further prosecution (see point VIII. above).

7.5 Therefore, the board finds that in the case in hand there are special reasons within the meaning of Article 11 RPBA 2020 to remit the case to the examining division.

7.6 Under these circumstances, the board exercises its discretion under Article 111(1) EPC and remits the case to the examining division for further prosecution.

## **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