Internal distribution code:

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

Datasheet for the decision of 19 July 2019

Case Number: T 0003/17 - 3.5.05

Application Number: 10767960.7

Publication Number: 2622518

IPC: G06F19/00, G06F3/01

Language of the proceedings: EN

Title of invention:
METHOD AND DEVICE FOR CONTROLLING APPARATUS

Applicant:
Brainlab AG

Headword:
Object-Object-User-Relationship/BRAINLAB

Relevant legal provisions:
EPC Art. 83
EPC R. 41(2)(e)

Keyword:
Sufficiency of disclosure - undue burden (yes)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0003/17 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 19 July 2019

Appellant: (Applicant)	Brainlab AG Olof-Palme-Straße 9 81829 München (DE)
Representative:	SSM Sandmair Patentanwälte Rechtsanwalt Partnerschaft mbB Joseph-Wild-Straße 20 81829 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 4 August 2016 refusing European patent application No. 10767960.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	A. Ritzka
Members:	E. Konak
	F. Blumer

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse the application for lack of inventive step (Article 56 EPC).

II. The appellant requested that the decision be set aside and a patent be granted based on a main request of claims 1 to 10, a first auxiliary request of claims 1 to 10, a second auxiliary request of claims 1 to 10, a third auxiliary request of claims 1 to 10, a fourth auxiliary request of claims 1 to 12, or a fifth auxiliary request of claims 1 to 12, all filed with the statement setting out the grounds of appeal. The main and first to fourth auxiliary requests are identical to the requests on which the contested decision is based.

III. In its preliminary opinion annexed to the summons to oral proceedings, the board raised objections, *inter alia*, under Article 83 and Rule 42(1)(e) EPC. The appellant did not reply in substance to the board's preliminary opinion.

IV. Oral proceedings were held in the absence of the appellant.

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

"A method for controlling apparatus comprising the following steps:

- identifying at least two objects and at least one part of a user’s body, being within the field of view of at least one optical camera, by using a

computational unit connected to the camera, that evaluates the camera images;

- determining the position, movement and/or alignment of the at least one identified part of the body and the at least two identified objects relative to each other;

- controlling at least one apparatus by means of the computational unit sending a corresponding predetermined command to the at least one apparatus, if predetermined criteria for the identity of the at least two identified objects and the at least one identified part of the body and their position, movement and/or alignment relative to each other are fulfilled."

VI. Claim 1 of the first auxiliary request reads as follows:

"A method for controlling a display screen in a medical environment, comprising the following steps:

- identifying the display-screen, 3D-glasses and the head and/or eyes of a user, being within the field of view of at least one optical camera, by using a computational unit connected to the camera, that evaluates the camera images;

- determining whether the user is wearing the 3D-glasses and is standing in front of the display-screen and/or is looking at the display-screen, by capturing the position and/or alignment of the 3D-glasses, the user's head and/or eyes, and the display-screen relative to each other;

- controlling the display screen to change from a 2D-mode to a 3D-mode, by means of the computational unit

sending a corresponding predetermined command, if it is determined that the user is wearing the 3D-glasses and is standing in front of the display-screen and/or is looking at the display-screen."

VII. Claim 1 of the second auxiliary request reads as follows:

"A method for controlling a display-screen in a medical environment comprising the following steps:

- identifying the display-screen, an instrument or apparatus, and a hand of a user, being within the field of view of at least one optical camera, by using a computational unit connected to the camera, that evaluates the camera images;

- determining whether the user is holding the instrument or apparatus in front of the display-screen, by capturing the position and/or movement of the display screen, the instrument or apparatus, and the hand of the user relative to each other;

- controlling the display-screen to display operating instructions corresponding to the instrument or apparatus, by means of the computational unit sending a corresponding predetermined command, if it is determined that the user is holding the instrument or apparatus in front of the display-screen."

VIII. Claim 1 of the third auxiliary request reads as follows:

"A method for controlling a display-screen in a medical environment comprising the following steps:

- identifying at least one plug, at least one socket, and a hand of a user, being within the field of view of at least one optical camera, by using a computational unit connected to the camera, that evaluates the camera images;

- determining whether the user is holding a plug or touching a socket, by capturing the position of said plug or said socket, and the hand of the user relative to each other, and capturing the position of a socket or a plug, respectively, that corresponds to said plug or said socket;

- controlling the display-screen to display the position of said corresponding socket or said corresponding plug, by means of the computational unit sending a corresponding predetermined command, if it is determined that the user is holding said plug or touching said socket, and a corresponding socket or a corresponding plug has been identified."

IX. Claim 1 of the fourth auxiliary request reads as follows:

"A method of determining the level of activity in a treatment room, comprising the following steps:

- identifying, via at least one optical camera, at least one object and at least one part of a user’s body being within the field of view of the camera;

- capturing, via a computational unit connected to the camera, the position, movement and/or alignment of the identified part of the body and the identified object;

- controlling, based on the registered identity of the object and the part of the body and their position, movement and/or alignment, relative to each other via the computational unit and by means of a corresponding predetermined command, a computer to record a value for the level of activity within the treatment room."

X. Claim 1 of the fifth auxiliary request reads as follows:

"A method of determining the level of activity in a treatment room, comprising the following steps:

- identifying, via at least one optical camera, an apparatus and a part of a user’s body being within the field of view of the camera;

- capturing, via a computational unit connected to the camera, the position, movement and/or alignment of the identified part of the body and the identified apparatus;

- controlling, based on the registered identity of the apparatus and the part of the body and their position, movement and/or alignment, relative to each other via the computational unit and by means of a corresponding predetermined command, a computer to record a value for the level of activity representing a use of the apparatus within the treatment room."

Reasons for the Decision

1. According to Article 83 EPC, a European patent application shall disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art. Rule 42(1)(e) EPC

further requires that at least one way of carrying out the claimed invention be described in detail.

2. The present application involves identifying and tracking at least two objects and one body part by a computational unit connected to optical cameras. The only statement in the entire application describing how a computational unit carries out the identification and tracking of the objects and the body parts is on page 4, antepenultimate paragraph, penultimate sentence, which merely states that this happens "by means of image capturing algorithms", without further specifying those algorithms.

3. The invention claimed in the first to third auxiliary requests is for use in a "medical environment"; the invention claimed in the fourth and the fifth auxiliary requests is for use "in a treatment room". The description refers in particular to a surgical context. As is notoriously known, body parts that are relevant for the invention, such as faces, heads, eyes or hands, are heavily occluded in a surgical context by operating room attire, in particular masks, caps, gloves, etc. In other "medical environments" or "treatment rooms", they may be bare. The application does not discuss any of these issues and does not disclose which computer vision algorithms are used for which body parts and under which conditions. The person skilled in the relevant art, who knows that this is no trivial task, is not presented with any teaching in this regard in the entire application. The main request is even broader and covers all kinds of objects and all kinds of body parts in all imaginable situations.

4. The "examples" on page 4, second and third paragraphs and, on page 5, penultimate paragraph to page 8, last

paragraph, which are the basis for the subject-matter of the first to fifth auxiliary requests, only disclose general ideas for potential applications of the abstract concepts of "object-user relationship" and "object-object-user relationship"; they do not describe in detail, within the meaning of Rule 42(1)(e) EPC, at least one way of carrying out a single one of these ideas.

5. Thus, the application does not place the skilled person in possession of at least one way of putting the claimed invention into practice, let alone over the whole range of the claims (See "Case Law of the Boards of Appeal of the European Patent Office", 8th edition 2016, II.C.4.4, "Invention to be performed over whole range claimed").

6. The board raised these objections in its preliminary opinion annexed to the summons to oral proceedings and further noted that similar objections had been raised in the International Preliminary Report on Patentability. As the appellant did not reply in substance to the board's preliminary opinion, the board sees no reason to change its preliminary opinion.

7. The application, therefore, does not clearly and completely disclose how the invention can be carried out by the person skilled in the art, contrary to the requirements of Article 83 EPC. For this reason alone, the appeal has to be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated