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**Datasheet for the decision
of 5 May 2023**

Case Number: T 0255/20 - 3.2.02

Application Number: 11837661.5

Publication Number: 2636021

IPC: A61B5/103, A61B5/11, G06F19/00

Language of the proceedings: EN

Title of invention:

COMPUTER AIDED ANALYSIS AND MONITORING OF MOBILITY
ABNORMALITIES IN HUMAN PATIENTS

Applicant:

Shani, Mordechai
Feldman, Yoram

Headword:

Relevant legal provisions:

EPC Art. 84, 111(1)
RPBA 2020 Art. 11, 12(2)

Keyword:

Claims - clarity - main request (yes)

Remittal - special reasons for remittal - (yes)

Primary object of appeal proceedings to review decision

Obiter Dictum not forming part of the grounds for refusal

Decisions cited:

T 0726/10

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0255/20 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 5 May 2023

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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 28 August 2019
refusing European patent application
No. 11837661.5 pursuant to Article 97(2) EPC**

Composition of the Board:

Chairman M. Alvazzi Delfrate
Members: D. Ceccarelli
Y. Podbielski

Summary of Facts and Submissions

- I. The applicant has appealed against the Examining Division's decision to refuse the application for lack of clarity of claim 1 of the main request.
- II. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request filed with the statement of grounds of appeal by letter dated 6 January 2020 or that the application be remitted for further prosecution.
- III. Claim 1 of the main request reads as follows:

"A system comprising:

one or more sensors configured to capture, in a calibration session, 3D positioning and orientation of limbs of a human patient, wherein the human patient is instructed to follow a sequence of movements in the calibration session; and

a processor configured to:

- (i) monitor, over the calibration session, a set of key points, wherein at least some of the key points are positioned in predefined locations on the limbs of the human patient; and
- (ii) generate an abnormality mobility profile of the human patient by analyzing the monitored set of key points in view of deviations from a predefined normal mobility profile representing a standard of a healthy human

following said sequence of movements,

wherein the abnormality mobility profile is indicative of mobility limitations and abnormalities of the human patient in terms of body-related and limb-related postures and gestures and further indicates compensatory movements of the human patient, said compensatory movements comprising shoulder flexion, shoulder elevation, shoulder rotation, shoulder abduction, elbow flexion and trunk forward displacement, trunk backward displacement, trunk right displacement and trunk left displacement, shoulder abduction and elbow flexion, when present; and

wherein the processor is further configured to semi automatically generate a set of physical training or physiotherapeutic exercises tailored for the human patient's motor capabilities, based on the abnormality mobility profile and additional input from a human expert,

wherein the system is further configured to:

monitor compliance of the human patient with the tailored physiotherapeutic exercises by capturing a physical training or physiotherapeutic sequence that includes 3D positioning and orientations of the limbs of the human patient over time;

monitor, over the physical training or physiotherapeutic sequence, the set of key

points on the human patient while the human patient performs the tailored physiotherapeutic exercises; and

analyze the monitored set of key points in the physical training or physiotherapeutic sequence, to yield an assessment of a physiotherapeutic condition of the human patient, based at least partially on the abnormality mobility profile."

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

The Examining Division had concluded that the feature in claim 1 "and wherein the processor is further configured to semi automatically generate a set of physical training or physiotherapeutic exercises tailored for the human patient's motor capabilities, based on the abnormality mobility profile and additional input from a human expert" constituted an attempt to define the claimed subject-matter in terms of a result to be achieved, this being contrary to Article 84 EPC.

However, the terms "semi automatically" and "tailored" were clear in view of their ordinary meaning, and the claim clearly indicated what had to be achieved, i.e. the semi-automatic generation of tailored exercises, and referred to a process step for achieving this, i.e. assessing the abnormality mobility profile along with input from a human expert. Hence, claim 1 defined the invention by the concrete features necessary to achieve the desired result.

Reasons for the Decision

1. The application

The application relates to a system for monitoring the position and the movement of limbs of a human patient. This system can find application for analysing mobility abnormalities of a patient and providing physical therapy.

The system comprises one or more sensors configured to capture, in a calibration session, 3D positioning and orientation of limbs of a human patient, who is instructed to follow a sequence of movements.

The system also comprises a processor configured to monitor a set of key points positioned in predefined locations on the limbs of the human patient and generate an abnormality profile by analysing the set of key points in view of deviations from a predefined normal mobility profile. The normal mobility profile represents a standard of a healthy human following the sequence of movements.

The processor is further configured to semi-automatically generate a set of physical training or physiotherapeutic exercises tailored for the human patient's motor capabilities, based on the abnormality mobility profile and additional input from a human expert.

The system is configured to monitor compliance of the human patient with the tailored physiotherapeutic exercises, monitor the set of key points while the human patient performs the tailored physiotherapeutic exercises and analyse the monitored set of key points

to yield an assessment of the physiotherapeutic condition of the human patient.

The system can be beneficial in providing effective physiotherapy to a patient.

2. Main request - clarity

In the impugned decision, the Examining Division held that the following feature in claim 1 defined a result to be achieved and led to a lack of clarity, contrary to Article 84 EPC:

"and wherein the processor is further configured to semi automatically generate a set of physical training or physiotherapeutic exercises tailored for the human patient's motor capabilities, based on the abnormality mobility profile and additional input from a human expert".

The Board does not share this view.

The feature in question does not define a result to be achieved. It defines a functional feature of the processor in terms of an output derived from some inputs, as is typically the case for claims defining how a processor is configured or programmed.

According to the claim, the processor outputs a set of exercises on the basis of monitored motor capabilities of a human patient and an additional input from a human expert. The expression "semi automatically" refers to the fact that the additional input is required.

Even if the claim does not define the algorithm according to which the inputs are considered for the

provision of the output, this is a matter of broadness of the claim, not clarity.

The Examining Division's explanation in points 15.2.1.1 and 15.3 of the impugned decision appear to refer to sufficiency of disclosure, not clarity, as they consider implementations over the whole scope of the claim and the disclosure of the claimed result. However, the decision was not based on an objection of insufficient disclosure under Article 83 EPC. In any case, the person skilled in the art, noting an anomaly in the motor capabilities of a patient, would have known how to implement an algorithm proposing exercises to help improve the patient's conditions taking into account additional user inputs. This is a matter of programming capabilities and knowledge of useful exercises for certain conditions.

In conclusion, the subject-matter of claim 1 is clear and complies with Article 84 EPC. Hence, the impugned decision is to be set aside.

3. Main request - remittal

Although in an obiter dictum the Examining Division raised an objection of lack of inventive step on the basis of one document of the prior art, the impugned decision is only based on lack of clarity in view of Article 84 EPC.

The objection of lack of inventive step in the obiter dictum is to be seen as mere voluntary information to the appellant on the preliminary opinion of the Examining Division (T 726/10, point 9 of the Reasons). The Examining Division did not perform a final assessment of compliance with Article 56 EPC, as

confirmed in the minutes of the oral proceedings, point 7, where it is stated that the discussion on Article 56 EPC was not finished. It is also questionable whether, in the analysis of inventive step, the Examining Division took into due consideration the feature held to be unclear.

Moreover, other requirements of the EPC, in particular novelty and inventive step over other cited prior-art documents, were not examined.

In view of the primary object of the appeal proceedings to review the decision under appeal in a judicial manner (Article 12(2) RPBA 2020), there are special reasons within the meaning of Article 11 RPBA 2020 for remitting the case to the Examining Division for further prosecution under Article 111(1) EPC, in accordance with the appellant's request.

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 Chairman:



A. Chavinier-Tomsic

M. Alvazzi Delfrate

Decision electronically authenticated