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Datasheet for the decision of 18 July 2024

Case Number: T 0684/22 - 3.2.08

Application Number: 10784198.3

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IPC: A61F5/56, A61M21/02, A61B5/103, G09G5/00, A61N1/36

Language of the proceedings: EN

Title of invention:
SYSTEMS AND METHODS FOR CONTROLLING POSITION

Patent Proprietor:
Advanced Brain Monitoring, Inc.

Opponent:
Philips International B.V.

Relevant legal provisions:
EPC Art. 54(2), 56, 83, 123(2)

Keyword:
Novelty - (yes)
Inventive step - (yes)
Sufficiency of disclosure - (yes)
Amendments - allowable (yes)

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Case Number: T 0684/22 - 3.2.08

D E C I S I O N
of Technical Board of Appeal 3.2.08
of 18 July 2024

Appellant: (Opponent)	Philips International B.V. High Tech Campus 5 5656 AE Eindhoven (NL)
Representative:	Philips Intellectual Property & Standards High Tech Campus 52 5656 AG Eindhoven (NL)
Respondent: (Patent Proprietor)	Advanced Brain Monitoring, Inc. 2237 Faraday Avenue, Suite 100 Carlsbad, CA 92008 (US)
Representative:	FRKelly Waterways House Grand Canal Quay Dublin D02 PD39 (IE)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 4 January 2022 concerning maintenance of the European Patent No. 2437696 in amended form.**

Composition of the Board:

Chairwoman	P. Acton
Members:	G. Buchmann
	K. Kerber-Zubrzycka

Summary of Facts and Submissions

I. The opposition division decided that the European patent No. 2 437 696 in amended form fulfilled the requirements of the EPC.

The opposition division held that the subject-matter of claim 1 according to the then valid main request fulfilled the requirements of Articles 83 and 123(2) EPC and that its subject-matter was novel and inventive.

II. The opponent filed an appeal against this decision.

III. Oral proceedings took place before the Board on 18 July 2024.

IV. At the end of the oral proceedings, the respondent (patent proprietor) requested that the patent be maintained on the basis of auxiliary request 0 filed during oral proceedings before the Board (main request), or alternatively, on the basis of one of the auxiliary requests 1 to 11 submitted with the reply to the statement setting out the grounds of appeal.

V. The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked.

VI. In the present decision, reference is made to the following documents:

D10 US 5081447
D11 US 5381801

D12 WO 2011/139141

VII. Claim 1 of the main request which was filed during the oral proceedings as "auxiliary request 0", reads as follows.

Amendments compared to claim 1 as originally filed are ~~deleted~~ or underlined. The feature numbering has been added by the Board.

F1
"A wearable position therapy device (100) for influencing the position of a user, the device ~~system~~ (100) comprising:
F2
a position detector (110) configured to generate positional signal data that can be used to determine a position of the user,
F3
a haptic feedback device (140) configured to generate tactile feedback to the user of the wearable position therapy device (100), and
F4
a microcontroller (130) in communication with the position detector (110) and the haptic feedback device (140), wherein the microcontroller (130) ~~being~~ is configured to:
F5
receive and analyze the positional signal data from the position detector (110),
F6
determine whether the user of the wearable position therapy device (100) is in a target sleeping position, and
F7
generate a control signal to cause the haptic feedback

device (140) to provide tactile feedback to the user to induce the user to change to a different, non-target sleeping position if the user of the wearable position therapy device (100) is in the target sleeping position,

F8

wherein the feedback is initiated only after a predetermined time period has elapsed in order to allow the user to initially fall asleep in the target sleeping position,

F9

wherein the user can reset the predetermined time period, and

F10

wherein the feedback begins at a low-intensity level, and, if a change in position is not detected after termination of the previous feedback, the feedback is presented at a higher-intensity level."

Auxiliary request 0 differs from the main request found allowable by the opposition division in the deletion of dependent claim 7.

VIII. The arguments of the respondent can be summarised as follows:

Amendments - Article 123(2) EPC

Features F8-F10 of claim 1 and the subject-matter of dependent claims 4-6 were directly and unambiguously derivable from the application as originally filed.

Sufficiency of disclosure - Article 83 EPC

The invention specified in claim 1, in particular including Features F8 and F9, was disclosed in a manner

sufficiently clear and complete for it to be carried out by a person skilled in the art.

Novelty - Article 54

The subject-matter of claim 1 was novel over D10 and over D12.

Inventive step - Article 56 EPC

The subject-matter of claim 1 involved an inventive step starting from D10 in combination with D11.

IX. The arguments of the appellant can be summarised as follows:

Amendments - Article 123(2) EPC

Features F8-F10 of claim 1 and the subject-matter of dependent claims 4-6 went beyond the application as originally filed.

Sufficiency of disclosure - Article 83 EPC

The invention specified in claim 1, in particular including Features F8 and F9, was not disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

Novelty - Article 54

The subject-matter of claim 1 lacked novelty over D10 and over D12.

Inventive step - Article 56 EPC
The subject-matter of claim 1 was not inventive starting from D10 in combination with D11.

Reasons for the Decision

1. Amendments - Article 123(2) EPC

1.1 Feature F9

According to added Feature F9, "the user can reset the predetermined time period".

The appellant argued that according to paragraph [0055] the time period was either predetermined or configurable. They further argued that the first sentence of paragraph [0057] which read "According to an embodiment, a user can reset the time period of the PTD 100 if the user has trouble falling asleep", referred to the embodiment of a configurable time period. The term "reset" had, for this embodiment, the meaning of "setting to a different value." The second sentence of paragraph [0057] read "For example, a user might be awakened during the night by the need to use the bathroom, and upon returning from the nocturnal use of the bathroom, the user can turn the PTD 100 off and then back on in order to reset the feedback delay." According to the appellant, in this second sentence the term reset had the meaning of "setting back to an initial value".

Since Feature F9 referred to the predetermined time period, the appellant concluded that the term "reset"

had the meaning of "setting back to an initial value" in Feature F9. Such a reset was, however disclosed only in the second sentence of paragraph [0057] and only functionally linked with switching the device on and off. Therefore, the first sentence of paragraph [0057] could not form a basis for Feature F9.

However, the assumption that the term "reset" had two different meanings in the context of the patent, cannot be inferred from the description. It is correct that the time period is either "predetermined" or "configurable" (paragraph [0055]). But paragraph [0057] states that the user can reset the time period (first sentence), and immediately afterwards gives an example for such a reset, namely by switching the device on and off (second sentence). The assignment of two different meanings to the term "reset" in paragraph [0057] cannot be inferred from this context. On the contrary, the author of the description would have used the term "configure" in paragraph [0057] if they had wanted to refer to the meaning of "setting the time period to a different value", since this term was already used in paragraph [0055].

Therefore, the first sentence of paragraph [0057] refers to the reset of the predetermined time period, and forms a basis of Feature F9. Since the wording is identical (apart from the specification of the time period as being predetermined), Feature F9 is based on paragraph [0057] and does not contravene Article 123(2) EPC.

1.2 Feature F8

The appellant objected that added Feature F8 according to which "the feedback is initiated only after a

predetermined time period has elapsed in order to allow the user to initially fall asleep in the target sleeping position," contravened Article 123(2) EPC.

According to the appellant, paragraph [0055] of the description as originally filed read: "positional feedback will be initiated only after a predetermined or configurable elapsed time period with the PTD 100 on" (emphasis added). This passage specified that the elapsed time period was measured from the point in time when the device was switched on. Omission of this aspect constituted an intermediate generalisation of the original disclosure because Feature 8 covered also other starting points of the predetermined time period.

However, the first sentence of paragraph [0057] discloses in general terms that the time period can be reset by the user, without restriction to a specific way of making the reset. Consequently, the original disclosure covers any possible starting point of the predetermined time period, without being restricted to the point in time of switching on the device. The restriction to a starting point by switching the device on may therefore be omitted from Feature F8 without violating Article 123(2) EPC.

1.3 Feature F10

In the written proceedings, the appellant raised an objection against added Feature F10 according to which "the feedback begins at a low-intensity level, and, if a change in position is not detected after termination of the previous feedback, the feedback is presented at a higher-intensity level."

Feature F10 is based on paragraphs [0062]-[0066].

Paragraph [0062] mentions that "the feedback stimulation routine begins at a low intensity level two-second haptic feedback interval" and "if gross movement of the user's body position is not identified, an additional feedback routine sequence can be applied" ... "For example, ..., if the PTD 100 does not detect that the patient has begun to change position *within four second of the* termination of the previous feedback routine, another *2 second long* feedback routine can be presented at a higher intensity level than the previous feedback routine."

The appellant argued that the two-second interval of haptic feedback and the four-second interval of waiting time might not be omitted without violating Article 123(2) EPC.

However, paragraph [0064] allows that "different haptic feedback intervals and lengths of pauses between intervals of increasing intensity of feedback can be used." Therefore, the functionality described in paragraph [0062] is not restricted to the time intervals of two and four seconds.

Hence, the omission of these time intervals in Feature 10 does not go beyond the application as originally filed.

1.4 Dependent claims 4-6

Dependent claims 4-6 were originally filed as claims 12, 14 and 15. Each of them originally depended on claim 1 only. The granted claims, however, were formulated as depending on "any preceding claim" which - as the appellant put forward - results in different combinations of subject-matter.

The appellant sweepingly argued that the combination of claim 4 with claim 3, and the combination of claim 5 with claim 4 and claim 3 were "not directly and unambiguously derivable from the originally filed disclosure." The appellant did, however, not give details as to why these combinations were not originally disclosed, or which subject-matter was added to the patent.

The fact that the dependency of the claims has changed, is no proof on its own for the absence of an original disclosure of the new combinations of technical features. For a complete assessment, a more detailed consideration of the description had to be made. The appellant did, however, not provide any detailed argumentation.

The respondent argued that the features of claims 1 and 4-6 were disclosed in a single embodiment and could therefore be combined in the claims.

The Board had no serious doubts that the combination of features of claims 4-6 as granted were derivable from the application as originally filed. Since the appellant did not provide a comprehensible reasoning to the contrary, the Board decided that the dependent claims do not contravene Article 123(2) EPC.

2. Sufficiency of disclosure - Article 83 EPC

2.1 Feature F8

The appellant argued that the patent only discloses that the initial assessment of whether the user of the device is in the target position, was delayed by a

predetermined time period. No sufficient disclosure was made referring to a delay of "initiating the feedback" as specified in Feature F8.

From the context of the patent it is, however, clear that if the assessment is delayed, also the feedback is delayed because the latter depends on the assessment.

For the skilled person there is no difficulty in carrying out a device which includes Feature F8.

2.2 Feature F9

In view of Feature F9, the appellant argued that the patent only describes a reset for resetting the time period to make the assessment of the user's position (paragraph [0057]), not for resetting the time period for initiation of the feedback as required by Feature F8.

It is evident from the patent in its entirety that resetting the assessment delay also resets the feedback delay. For example, paragraph [0055] explains that the feedback will be started after the predetermined time period.

2.3 Therefore, the patent describes the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

3. Novelty - Article 54

3.1 Novelty over D12

3.1.1 D12 discloses

F1
A wearable position therapy device (35) for influencing the position of a user, the device comprising:

F2
a position detector (3) configured to generate positional signal data that can be used to determine a position of the user (page 8, line 35 - page 9, line 3),

F3
a haptic feedback device (vibration motor 6) configured to generate tactile feedback to the user of the wearable position therapy device (page 9, lines 5-11), and

F4
a microcontroller (1) in communication with the position detector (3) and the haptic feedback device (6) (page 8, lines 22-33), wherein the microcontroller (1) is configured to:

F5
receive and analyze the positional signal data from the position detector (3),

F6
determine whether the user of the wearable position therapy device is in a target sleeping position (page 12, lines 8-17), and

F7
generate a control signal to cause the haptic feedback device (6) to provide tactile feedback to the user to induce the user to change to a different, non-target sleeping position if the user of the wearable position

therapy device is in the target sleeping position.

3.1.2 Feature F8 requires that "the feedback is initiated only after a predetermined time period has elapsed in order to allow the user to initially fall asleep in the target sleeping position."

The embodiment described in D12 (Figure 2, page 13, line 19 - page 14, line 25) includes the possibility that the running sleep-in timer is ignored if a snoring sound has been detected (step 117 yes, page 16, lines 35-37). The snoring indicates that the user is already asleep, so that the sleep-in timer can be ignored. This is in contrast to Feature F8 which requires the predetermined time period to be elapsed before allowing feedback to the user.

It is correct that the algorithm of D12, Figure 2 includes a path according to which the time period of the sleep-in timer has to be terminated before the algorithm continues to the activation of the actuator (from step 121 to steps 123-135). However, looking at the whole algorithm, it is clear that it does not work in a way that always requires the sleep-in timer to be terminated. In particular, as described on page 16, lines 23-32, the sleep-in timer can be interrupted by the detection of snoring (step 117) or inactivity (step 122) and the algorithm continues with the activation of the actuator (steps 123ff).

In D12, no operational mode is foreseen which exclusively waits for the elapsing of the sleep-in period before a possible activation of the actuator.

Therefore, the device of D12 does not disclose Feature F8 and the subject-matter of claim 1 is novel over D12.

In view of the above, the question whether or not the priority right of the application was validly claimed, needs not be decided.

3.2 Novelty over D10

3.2.1 D10 discloses

F1
A wearable position therapy device (10) for influencing the position of a user, the device comprising:

F2
a position detector (20, 22) configured to generate positional signal data that can be used to determine a position of the user,

F3
a haptic feedback device (40) configured to generate tactile feedback to the user of the wearable position therapy device, and

F4
a controller in communication with the position detector (20, 22) and the haptic feedback device (40), wherein the controller is configured to:

F5
receive and analyze the positional signal data from the position detector,

F6
determine whether the user of the wearable position therapy device is in a target sleeping position (on the back), and

F7
generate a control signal to cause the haptic feedback device (40) to provide tactile feedback to the user to induce the user to change to a different, non-target sleeping position if the user of the wearable position therapy device is in the target sleeping position.

The device of D10 has the purpose of training a person not to lie on the back. If the user comes to lie on the back, an alarm is generated to urge the user to turn. In order to avoid the alarm to start during transient positions, the alarm is started only after the elapse of about 5 seconds (column 8, lines 11-29).

3.2.2 Regarding Feature F8 according to which "the feedback is initiated only after a predetermined time period has elapsed in order to allow the user to initially fall asleep in the target sleeping position", the appellant argued that the 5 seconds which the device waits in order to check if the user lies on the back (instead of just turning), could be sufficient to "allow the user to initially fall asleep".

In order to fulfil the definition of Feature F8, a device must be suitable to allow the user to initially fall asleep in the target sleeping position. A skilled person does, however, not regard a delay of 5 seconds as being normally sufficient for a person to fall asleep. Therefore, the device of D10 is not suitable to allow the user to initially fall asleep, and does not disclose Feature F8.

3.2.3 Regarding Feature F9 according to which "the user can reset the predetermined time period", the appellant argues that switching on and off of the device would reset the time period.

However, since in D10 there is no time period which allows the user to fall asleep, also the reset of such time period is not disclosed in D10.

3.2.4 Therefore, the subject-matter of claim 1 is novel and differs from D10 at least in Features 8 and 9.

4. Inventive step - Article 56 EPC

4.1 The appellant raised an objection regarding inventive step starting from D10 in combination with D11.

4.2 The subject-matter of claim 1 differs from D10 at least in Features F8 and F9 (see above).

4.3 According to the appellant, Feature F8 had the effect that the user was allowed to fall asleep in a target position without the feedback being initiated. The problem to be solved might be regarded as to adapt the device of D10 in a way that the user is allowed to fall asleep in a target position without the feedback being initiated.

4.4 D11 discloses a wearable position therapy device in which, similar to the device of D10, an alarm is started if the user rests on its back for longer than some seconds. The function is the same as in D10, namely to urge the user to turn to a side position without starting the alarm during transient positioning on the back.

4.5 The appellant argued that D11, column 5, lines 54-57 disclosed that the delay of several seconds might be extended to several minutes under certain circumstances, e.g. when a person was resting upon his/her back prior to going to sleep.

Therefore, according to the appellant, it was obvious to provide the device of D10 with a delay of several minutes which was a time period sufficient for the user

to fall asleep.

4.6 D11 does, however, not mention the problem to be solved as it was formulated by the appellant. The circumstance of the user "resting upon his/her back prior to going to sleep" does not imply that the delay is intended for the user to actually fall asleep during this time period. Therefore, D11 does not motivate the skilled person to use the teaching of D11 for solving the problem posed.

Additionally, even if one tried to adapt the device of D10 in a way as to extend the timer delay from 5 seconds to several minutes, the function of the device would be completely changed. The device of D10 has the purpose of training a user not to stay in a supine position. For this purpose, the timer delay is set to about 5 seconds so that the user is urged not to stay in the supine position longer than that. The delay of 5 seconds in D10 is reset every time when the user rests on the side. Extending the delay to several minutes would allow the user to stay in a supine position for several minutes every time he rested on the side for a short time before. This is not a reset which is useful for a device which allows the user to initially fall asleep. In contrast, such a permanent reset to a quite long time period is against the teaching of D10 which intends to alert the user quickly when resting on the back. Therefore, the skilled person would not use the prolonged delay of D11 in order to adapt the device of D10.

4.7 Therefore, the subject-matter of claim 1 involves an inventive step starting from D10 in combination with D11.

Order

For these reasons it is decided that:

The decision under appeal is set aside. The case is remitted to the opposition division with the order to maintain the patent as amended in the following version:

Description:
Paragraphs 2-11, 14, 17-38, 40-42, 44-50, 52-64, 66-68, 70-72, 76 of the patent specification

Paragraphs 1, 13, 15, 16, 39, 43, 51, 65, 69, 73-75 filed during oral proceedings before the opposition division on 15 November 2021

Claims:
No. 1-6 filed as auxiliary request 0 during oral proceedings before the Board on 18 July 2024

Drawings:
Figures 1-9 of the patent specification.

The Registrar: The Chairwoman:

C. Moser P. Acton

Decision electronically authenticated