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**Datasheet for the decision
of 26 November 2021**

Case Number: T 0554/19 - 3.5.05

Application Number: 15771747.1

Publication Number: 3129907

IPC: G06F19/00

Language of the proceedings: EN

Title of invention:

PHYSICAL ACTIVITY AND WORKOUT MONITOR

Applicant:

Apple Inc.

Headword:

Inactivity counter/APPLE

Relevant legal provisions:

EPC Art. 56

RPBA Art. 12(4)

RPBA 2020 Art. 13(1)

Keyword:

Inventive step - main request and auxiliary requests I to III
(no)

Late-filed request - auxiliary requests IV to VII - submitted
with the statement of grounds of appeal - request could have
been filed in first instance proceedings (yes) - admitted (no)

Amendment to appeal case - auxiliary requests VIII to XI -
suitability of amendment to resolve issues raised (no)

Decisions cited:

T 1741/08



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Case Number: T 0554/19 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 26 November 2021

Appellant: Apple Inc.
(Applicant) One Apple Park Way
Cupertino CA 95014 (US)

Representative: Zacco Denmark A/S
Arne Jacobsens Allé 15
2300 Copenhagen S (DK)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 10 August 2018
refusing European patent application No.
15771747.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair A. Ritzka
Members: E. Konak
D. Prietzel-Funk

Summary of Facts and Submissions

I. The appeal is against the examining division's decision to refuse the application. The examining division decided that the main request and auxiliary requests I to IV then on file did not meet the requirements of, *inter alia*, Article 56 with regard to the following document:

D6: US 2013/184613 A1

II. With its statement setting out the grounds of appeal, the appellant re-filed the main request and auxiliary requests I to III on which the contested decision was based and filed new auxiliary requests IV to VII. It requested that the decision be set aside and that a patent be granted on the basis of one of the requests. It requested oral proceedings as an auxiliary measure.

III. In its preliminary opinion issued in preparation for the oral proceedings, the board raised objections under, *inter alia*, Articles 123(2) and 56 EPC and informed the appellant that it was minded not to admit auxiliary requests IV to VII into the appeal proceedings.

IV. As a reply, the appellant filed further auxiliary requests VIII to XI.

V. Oral proceedings were held before the board.

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

"A computer-implemented method comprising:

determining, using one or more processors, that a physical activity has been performed by a user wearing an electronic device, based on activity data generated by a sensor of the electronic device;

determining whether the physical activity corresponds to a first type based on a first set of criteria and determining whether the physical activity corresponds to a second type based on a second set of criteria;

in response to determining that the physical activity corresponds to the first type, updating a first value, stored in a memory device, based on the activity data;

in response to determining that the physical activity corresponds to the second type, updating a second value, stored in the memory device, based on the activity data;

controlling an inactivity timer that measures a length of time that the user is inactive based on the activity data, wherein controlling the inactivity timer comprises:

- resetting a value of the inactivity timer in response to determining, based on the activity data, that the user has performed a threshold amount of activity;
- incrementing the value of an inactivity counter in response to the value of the inactivity timer reaching an inactivity threshold; and
- resetting the value of the inactivity timer in response to the value of the inactivity timer reaching an inactivity threshold; and

displaying:

- a first indicator representative of the first value, the first value representing an aggregate amount of the first type of physical activity detected from the sensor over a period of time;
- a second indicator representative of the second value, the second value representing an aggregate

amount of the second type of physical activity detected from the sensor over the period of time; and
a third indicator representative of the value of the inactivity counter."

Claim 1 of auxiliary request I differs from claim 1 of the main request as follows (with the additions underlined):

"[...]

incrementing the value of an inactivity counter in response to the value of the inactivity timer reaching an inactivity threshold;
wherein the inactivity counter represents the number of fixed-length segments of time during which the user is continuously inactive for the entirety of a respective segment; and
resetting the value of the inactivity timer in response to the value of the inactivity timer reaching an inactivity threshold; and

[...]"

Claim 1 of auxiliary request II differs from claim 1 of auxiliary request I as follows (with the additions underlined):

"[...]

controlling an inactivity timer that measures a length of time that the user is inactive based on the activity data generated by a sensor of the electronic device during a fixed-length segment of time, wherein controlling the inactivity timer comprises:
resetting a value of the inactivity timer in response to determining, based on the activity data, that the user has performed a threshold

amount of activity during a fixed-length segment of time based on activity data generated by a sensor of the electronic device;
incrementing the value of an inactivity counter in response to the value of the inactivity timer reaching an inactivity threshold duration;
wherein the inactivity counter represents the number of fixed-length segments of time during which the user is continuously inactive for the entirety of a respective segment;
resetting the value of the inactivity timer in response to the value of the inactivity timer reaching an inactivity threshold duration; and
[...]"

Claim 1 of auxiliary request III differs from claim 1 of auxiliary request II as follows (with the additions underlined):

"[...]
wherein the inactivity counter represents the number of fixed-length segments of time during which the user is continuously inactive for the entirety of a respective segment;
generating a notification in response to the value of the inactivity timer reaching a warning threshold duration, wherein the warning threshold duration is less than the inactivity threshold duration;
resetting the value of the inactivity timer in response to the value of the inactivity timer reaching an inactivity threshold duration; and
[...]"

VII. Claim 1 of auxiliary requests IV to VII is identical to claim 41 of the main request and auxiliary requests I to III respectively.

Claim 1 of auxiliary request IV reads as follows:

"A computer-implemented method comprising:
determining, using one or more processors, that a physical activity has been performed by a user wearing an electronic device, based on activity data generated by a sensor of the electronic device;
determining whether the physical activity corresponds to a first type based on a first set of criteria and determining whether the physical activity corresponds to a second type based on a second set of criteria;
in response to determining that the physical activity corresponds to the first type, updating a first value, stored in a memory device, based on the activity data;
in response to determining that the physical activity corresponds to the second type, updating a second value, stored in the memory device, based on the activity data;
for each predetermined segment of time of a plurality of predetermined segments of time:
 determining whether a threshold amount of a predetermined activity of a predetermined type was performed; and
 in accordance with a determination that the threshold amount of the predetermined activity of the predetermined type was performed, incrementing the value of an activity counter; and
displaying:
 a first indicator representative of the first value, the first value representing an aggregate amount of the first type of physical activity detected from the sensor over a period of time;

a second indicator representative of the second value, the second value representing an aggregate amount of the second type of physical activity detected from the sensor over the period of time; and
a third indicator representative of the value of the activity counter over the period of time."

Claim 1 of auxiliary request V differs from claim 1 of auxiliary request IV as follows (with the additions underlined):

"[...]

in accordance with a determination that the threshold amount of the predetermined activity of the predetermined type was performed, incrementing the value of an activity counter;
wherein the activity counter represents the number of fixed-length segments of time during which the threshold amount of a predetermined activity of a predetermined type was performed; and

displaying:

[...]"

Claim 1 of auxiliary request VI differs from claim 1 of auxiliary request V as follows (with the additions underlined):

"[...]

for each predetermined segment of time of a plurality of predetermined segments of time:

determining whether a threshold amount of a predetermined activity of a predetermined type was performed based on activity data generated by a sensor of the electronic device during a respective predetermined segment of time; and

in accordance with a determination that the threshold amount of the predetermined activity of the predetermined type was performed based on activity data generated by a sensor of the electronic device during a respective predetermined segment of time, incrementing the value of an activity counter;

wherein the activity counter represents the number of fixed-length segments of time during which the threshold amount of a predetermined activity of a predetermined type was performed based on activity data generated by a sensor of the electronic device; and

[...]"

Claim 1 of auxiliary request VII differs from claim 1 of auxiliary request VI as follows (with the additions underlined):

"[...]

wherein the activity counter represents the number of fixed-length segments of time during which the threshold amount of a predetermined activity of a predetermined type was performed based on activity data generated by a sensor of the electronic device;

in accordance with a determination that a threshold amount of the predetermined activity of the predetermined type has not been performed after a threshold amount of time during a predetermined segment of time, generating a notification, wherein the threshold amount of time is less than the predetermined segment of time; and

displaying:

[...]"

VIII. Claim 1 of auxiliary requests VIII to XI is identical to claim 1 of the main request and auxiliary requests I to III respectively.

Reasons for the Decision

1. Main request

1.1 The contested decision found claim 1 of the main request not to involve an inventive step with regard to D6.

1.2 The appellant argued in the statement setting out the grounds of appeal that claim 1 differed from D6 in, *inter alia*, the features of displaying a first and a second indicator with values representing the aggregate amount of a first and a second type of physical activity. In its preliminary opinion, the board agreed with the contested decision that these features were disclosed in D6, paragraph [00058] and indicated that the appellant did not elaborate on why it considered these features to be new. The appellant did not pursue this argument any further.

1.3 Instead, in its statement setting out the grounds of appeal, the appellant argued that the following distinguishing features of claim 1 were inventive.

"controlling the inactivity timer comprises:

resetting a value of the inactivity timer in response to determining, based on the activity data, that the user has performed a threshold amount of activity;

incrementing the value of an inactivity counter in response to the value of the inactivity timer reaching an inactivity threshold; and

resetting the value of the inactivity timer in response to the value of the inactivity timer reaching an inactivity threshold; and

displaying:

[...]

a third indicator representative of the value of the inactivity counter."

- 1.4 In this regard, the appellant did not contest that D6 disclosed an invalidity timer but argued that the resetting of the inactivity timer as described in claim 1 and the inactivity counter were not disclosed in D6. However, given the disclosure in D6, paragraph [0069] that the system may require "a sufficient level of activity", e.g. "may require at least 30 minutes of activity to avoid additional warnings for a period of time such as 1 hour, 2 hours, 3 hours, etc.", the board considers D6 to disclose the feature of "resetting the value of the inactivity timer in response to the value of the inactivity timer reaching an inactivity threshold". The user-defined periods such as "1 hour, 2 hours, 3 hours" in this example correspond to the "inactivity threshold" duration defined in claim 1.
- 1.5 Regarding the other resetting of the timer among the alleged distinguishing features, namely "resetting a value of the inactivity timer in response to determining, based on the activity data, that the user has performed a threshold amount of activity", the

example in D6, paragraph [0069] discloses a "threshold amount of activity", e.g. at least 30 minutes. However, it does not disclose that the inactivity timer is reset when this threshold is reached. Nevertheless, the board cannot see any technical effect in resetting the inactivity timer in response to the performance of sufficient activity within a time period. This is merely an activity pattern that a user wishes to pursue in their daily life which they can define as they wish. This indeed holds for the definition of all (in)activity durations and thresholds in the claimed subject-matter.

1.6 The board also cannot see any technical effect in counting the number of inactive periods with the inactivity counter of claim 1. The appellant argued in the statement setting out the grounds of appeal that these features had the technical effect of objectively quantifying or measuring the distribution of activity disrupting inactivity. Counting is as a matter of fact objective; it quantifies and measures. However, being objective or quantifying is not sufficient for producing a technical effect. Otherwise mathematical or statistical methods as such, which are objective and quantitative, would also be technical, but they are not.

1.7 Although the examining division found displaying an indicator representative of the value of this counter to the user to be the result of "medical research" or to correspond to "requirements [...] given by a physiologist or medical practitioner", there is no need for these considerations. Displaying this indicator is a presentation of information without any technical character.

1.8 At the oral proceedings, the appellant referred to paragraph [0329] of the description and argued that the claimed inactivity counter and its display as a third indicator had the technical effect of more quickly and efficiently generating a user interface that provides feedback to a user on their physical activities. It emphasised the importance of optimising power consumption in mobile and wearable devices to increase the time between battery charges. Although the method of D6 monitored user activities and took the inactive period into account, it calculated and presented accumulated energy expenditure points instead of a simple inactivity metric. This continuous calculation in the background consumed considerable resources. In contrast, the inactivity counter of claim 1 provided for simple and efficient feedback which did not consume power when the user was inactive. Furthermore, recent studies had demonstrated the importance of avoiding extended periods of inactivity to avoid health problems. Therefore, the objective technical problem could be regarded as how to provide an alternative and more efficient way of providing feedback to a user on their physical activity and preventing prolonged phases of inactivity.

The board is not convinced by these arguments. Both the method of claim 1 and the method of D6 require continuous monitoring of physical activity by sensors worn by the user. D6 is also aware of the importance of carrying out a threshold amount of activity within each time period and takes into account "interpositionings of activities and inactivities" (see D6, paragraphs [0060], [0062], [0063] and [0068] to [0069]). Both methods measure these periods with timers. Therefore, the board cannot see how why the method of claim 1 would conserve power compared to the method in D6. To

the contrary, it could be argued that the maintenance of the inactivity counter in claim 1, which does not exist in D6, would require more power. The alleged conservation of power mentioned in paragraph [0329] seems instead to be an example of a broken technical chain (see T 1741/08, point 2.1.6 of the Reasons), according to which an alternative user interface "reduces the cognitive burden on a user", "enabling [the] user to monitor attributes of [their] physical activities [...] more quickly", thus arguably conserving power. The board cannot accept such a broken chain as evidence of a technical effect. Finally, whether a detected and measured period of inactivity is presented to the user as part of an accumulated total of activity points or via a counter is not a technical matter.

1.9 Therefore, the subject-matter of claim 1 of the main request does not involve any inventive step (Article 56 EPC).

2. Auxiliary requests I to III

2.1 The amendments to claim 1 of auxiliary request I are rather of a clarifying nature. They explicitly repeat certain details at least implicit in claim 1 of the main request, in particular the inactivity counter being a number (which any counter is) and this number representing the number of fixed-length time segments during which the user was inactive (which follows from the preceding step of incrementing the counter in response to the inactivity timer reaching an inactivity threshold). At the oral proceedings, the appellant repeated that the distinguishing features of claim 1 of auxiliary request I provided different, improved feedback compared to D6, but these arguments had been

taken into account in the assessment of claim 1 of the main request.

Therefore, the subject-matter of claim 1 of auxiliary request I lacks an inventive step for the same reasons as claim 1 of the main request (Article 56 EPC).

- 2.2 The amendments to claim 1 of auxiliary request II are also merely of a clarifying nature. They state explicitly that the inactivity threshold is a duration (which was evident in claim 1 of the main request from the fact that the inactivity timer reaches this threshold) and reiterate that the activity data is generated by sensors during fixed-length segments of time. The appellant did not present any arguments in its statement setting out the grounds of appeal on why these additional amendments contributed to an inventive step and referred at the oral proceedings to its written submissions.

Therefore, the subject-matter of claim 1 of auxiliary request II lacks an inventive step for the same reasons as claim 1 of the main request (Article 56 EPC).

- 2.3 Claim 1 of auxiliary request III has the additional feature of generating a notification in response to the value of the inactivity timer reaching a warning threshold duration, which is lower than the inactivity threshold duration. However, as noted by the contested decision, D6, paragraphs [0062] and [0068] discloses such notifications. The appellant argued in the statement setting out the grounds of appeal that this notification had the combined technical effect of credibly assisting the user in performing a technical task by means of a continued and/or guided human-machine interaction process. The board informed the

appellant in its preliminary opinion that there was no technical task in the case at hand, in particular walking or sitting were not technical tasks. Since the appellant merely referred to its written submissions at the oral proceedings, the board sees no reason to change this preliminary opinion.

Therefore, the subject-matter of claim 1 of auxiliary request III also lacks an inventive step (Article 56 EPC).

3. Admittance of auxiliary requests IV to VII (Article 12(4) RPBA 2007)
 - 3.1 With the statement setting out the grounds of appeal, the appellant filed additional auxiliary requests IV to VII, which respectively contain a subset of the claims of the main request and auxiliary requests I to III on which the contested decision was based, claim 1 of each of these requests corresponding to claim 41 of the main request and auxiliary requests I to III respectively.
 - 3.2 In accordance with Article 12(4) RPBA 2007, the board has discretion not to admit requests which could have been presented in the examination proceedings. Since auxiliary requests IV to VII contain subsets of the claims of requests filed in the examination proceedings, it follows that they could have been presented in the examination proceedings.
 - 3.3 The appellant argued at the oral proceedings that it had expected the examining division to grant a patent based on a higher-ranking request and was surprised by the outcome of the oral proceedings. Furthermore, its representative did not have instructions to file further requests, if necessary, at the oral proceedings

before the examining division. However, an applicant summoned by an examining division to oral proceedings with a preliminary opinion that the requests on file are not allowable cannot be surprised by the fact that the examining division maintains its opinion at the end of the oral proceedings. Nor can the lack of instructions to a representative be used as an excuse to postpone to the appeal proceedings what should have been done in the examination proceedings. Furthermore, the fact that the appellant filed auxiliary request IV on which the contested decision is based during the oral proceedings before the examining division shows that it could indeed still file further requests at the final stage of the examination proceedings.

- 3.4 Therefore, the board does not admit auxiliary requests IV to VII into the appeal proceedings.

- 4. Admittance of auxiliary requests VIII to XI (Article 13(1) RPBA 2020)
 - 4.1 The appellant submitted that auxiliary requests VIII to XI were filed in reaction to the board's objection in its preliminary opinion under Article 123(2) EPC to claim 41 of the main request and auxiliary requests I to III. Auxiliary requests VIII to XI differ from these requests in that claim 41 and its dependent claims were deleted. As the appellant also acknowledged at the oral proceedings, this deletion is not suitable for overcoming the inventive-step objection to claim 1 of the main request and auxiliary requests I to III.

 - 4.2 For this reason, the board does not admit auxiliary requests VIII to XI.

5. Since there is no allowable request, 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