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Datasheet for the decision of 18 November 2022

Case Number: T 1612/20 - 3.5.05

Application Number: 16153000.1

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Language of the proceedings: EN

Title of invention:
METHOD FOR OPERATING A MEDICAL SYSTEM, COMPUTER PROGRAM PRODUCT, MEDICAL SYSTEM, AND CONTROL DEVICE

Applicants:
Roche Diabetes Care GmbH
F. Hoffmann-La Roche AG

Headword:
Two thresholds for signaling data/ROCHE

Relevant legal provisions:
EPC Art. 54(1), 54(2), 56

Keyword:
Novelty - main request (no)
Inventive step - auxiliary request (no)

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Case Number: T 1612/20 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 18 November 2022

Appellant: (Applicant 1)	Roche Diabetes Care GmbH Sandhofer Straße 116 68305 Mannheim (DE)
Appellant: (Applicant 2)	F. Hoffmann-La Roche AG Grenzacherstrasse 124 4070 Basel (CH)
Representative:	Bittner, Thomas L. Boehmert & Boehmert Anwaltspartnerschaft mbB Pettenkoferstrasse 22 80336 München (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 12 March 2020 refusing European patent application No. 16153000.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	A. Ritzka
Members:	E. Konak
	K. Kerber-Zubrzycka

Summary of Facts and Submissions

I. The appeal is against the examining division's decision to refuse the application. The examining division decided, *inter alia*, that auxiliary requests 1 and 2 then on file did not involve an inventive step (Article 56 EPC).

II. The contested decision makes reference to the following documents:

D2: US 2015/116112 A1
D3: Lee et al., "A Mobile Care System With Alert Mechanism", IEEE Transactions on Information Technology in Biomedicine, Vol. 11 no. 5, September 2007, pages 507-517

III. With the statement setting out the grounds of appeal, the appellants re-filed the auxiliary requests on which the contested decision is based, respectively, as their main request and auxiliary request. They requested that the decision be set aside and that a patent be granted on the basis of one of these requests. They further requested oral proceedings as an auxiliary measure.

IV. The board summoned the appellants to oral proceedings. In a communication pursuant to Article 15(1) RPBA 2020, it gave its preliminary opinion that the main request did not meet the requirements of Article 54(1) and (2) EPC and the auxiliary request did not meet the requirements of Article 56 EPC.

V. Oral proceedings were held before the board.

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

"A method for operating a medical system (10) comprising a sensor device (20) continuously monitoring a physiological parameter, a control device (30), and receiving devices, the method, in the control device (30), comprising:
- providing a first group of receiving devices (70), wherein each of the receiving devices is assigned to a user;
- providing a second group of receiving devices (80), wherein each of the receiving devices is assigned to a user, and the second group of receiving devices (80) comprises at least one receiving device not being a member of the first group of receiving devices (70);
- providing a first threshold value for the physiological parameter in the control device (30), the first threshold value being assigned to the first group of receiving devices (70), configured to notify the respective user in response to receiving signaling data from the control device (30);
- providing a second threshold value for the physiological parameter in the control device (30), the second threshold value being different from the first threshold value and assigned to the second group of receiving devices (80) configured to notify the respective user in response to receiving the signaling data from the control device (30);
- receiving a stream of monitoring data indicating a physiological parameter continuously monitored by the sensor device (20) in the control device (30);
- determining a present value for the physiological parameter from the stream of monitoring data; and
- transmitting,
    - in response to the present value exceeding the first threshold value, the signaling data from the control device (30) to the first group of receiving devices (70), and

- in response to the present value exceeding the second threshold value, the signaling data from the control device (30) to the second group of receiving devices (80);

the method further comprising applying a sub-prioritization within at least one of the first group of receiving devices (70) and the second group of receiving devices (80), comprising, for the receiving devices from at least one of the first group of receiving devices (70) and the second group of receiving devices (80):
- providing device information for the receiving devices in the control device (30);
- prioritizing the receiving devices according to the device information, thereby determining, in the control device (30), a prioritized order of the receiving devices;
- transmitting the signaling data from the control device (30) to the receiving devices according to the prioritized order;
- receiving response information in the control device (30), the response information indicating a user response from a receiving device notified by receiving the signaling data; and
- in response to receiving the response information in the control device (30), interrupting further transmission of the signaling data, thereby, preventing transmission of the signaling data to at least one remaining receiving device within the prioritized order which has not received the signaling data before."

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

[...]

- providing device information indicative of a present location for each of the receiving devices in the control device (30);
- prioritizing the receiving devices according to the device information by proximity to the control device (30), thereby determining, in the control device (30), a prioritized order of the receiving devices;
[...]

Reasons for the Decision

1. Main request

1.1 The contested decision found that claim 1 of the main request did not involve an inventive step starting from D3.

1.2 The appellants argued that the following features F1.3, F1.4, F1.7.1, F1.7.2, F1.8.1, F1.8.2 and F1.8.5 of claim 1 of the main request were not disclosed by D3:

F1.3 providing a first threshold value for the physiological parameter in the control device (30), the first threshold value being assigned to the first group of receiving devices (70), configured to notify the respective user in response to receiving signaling data from the control device (30)

F1.4 providing a second threshold value for the physiological parameter in the control device (30), the second threshold value being different from the first threshold value and assigned to the second group of receiving devices (80) configured to notify the respective user in response to receiving the signaling data from the control device (30)

F1.7.1 in response to the present value exceeding the first threshold value, the signaling data from the control device (30) to the first group of receiving devices (70)

F1.7.2 in response to the present value exceeding the second threshold value, the signaling data from the control device (30) to the second group of receiving devices (80)

F1.8.1 providing device information for the receiving devices in the control device (30)

F1.8.2 prioritizing the receiving devices according to the device information, thereby determining, in the control device (30), a prioritized order of the receiving devices

F1.8.5 in response to receiving the response information in the control device (30), interrupting further transmission of the signaling data, thereby, preventing transmission of the signaling data to at least one remaining receiving device within the prioritized order which has not received the signaling data before

1.3 Regarding features F1.3, F1.4, F1.7.1 and F1.7.2, the appellants argued that the "urgency levels" in D3 were determined only based on elapsed time. While the appellants did not contest that the alerts in D3 were generated based on physiological parameter thresholds, they argued that there was no reference anywhere in D3 to any connection between physiological parameter thresholds and urgency levels. With regard to D3, page 511, right-hand column, second paragraph, last sentence, which reads "*Note that since the*

physiological information of each patient is different, the system setting such as related parameters of emergency conditions and healthcare services provided in different levels are set by care providers according to personal condition and medical history of each patient", cited in the contested decision, the appellants argued that this sentence should be understood within the concept taught in D3 as referring to choosing shorter time intervals for the elapsed time if a patient's personal condition so requires. The formula (1) for determining the urgency level *U(t)*, given on page 511, right-hand column, did not take any physiological parameter threshold into account.

The board is not convinced by the appellants' interpretation of D3. While it is true that in D3 the change in the current urgency level of an outstanding alert is in accordance with elapsed time (see page 511, right-hand column, antepenultimate paragraph, *"The current urgency level can be changed [...]";* see also Fig. 10, "Update urgency" box), the initial determination of the urgency level when the alert condition arises is not related to the disputed "elapsed time". Indeed, as stated in the next paragraph (i.e. page 511, right-hand column, penultimate paragraph) with regard to the formula *U(t)* for the change in the urgency level, the "elapsed time" *t* is "the elapsed time after alert is transmitted". This parameter cannot have any value at the initial determination of the urgency level when the alert condition arises, namely before the first alert is transmitted (namely Fig. 10, "Initial alert" box). The appellants argued that an initial alert would always have the urgency level "Normal"; however, this interpretation would mean that, no matter how critical a patient's , an email would merely be sent according

to the strategy in Table I. Such an interpretation would contradict page 511, right-hand column, second paragraph, last sentence, which discusses emergency conditions. Therefore, the only reasonable interpretation of Table I indicating different urgency levels and of page 511, right-hand column, second paragraph, last sentence, is that, depending on the threshold that a physiological parameter might exceed, alerts are initially classified into different levels of urgency and are then addressed to different groups of healthcare providers.

It should be noted that the contested decision is inconsistent. The examining division identified part of features F1.3 and F1.4 as distinguishing features but then came to the conclusion that these features were implicitly disclosed by D3. It then concluded that claim 1 lacked an inventive step; however, if a feature is implicit in the closest prior art, it cannot be a distinguishing feature.

Therefore, features F1.3, F1.4, F1.7.1 and F1.7.2 are not novel.

1.4 Regarding features F1.8.1 and F1.8.2, the appellants argued that the identity of the healthcare providers in the priority table, Table II, on page 511 of D3 cannot be considered "device information"; however, since a healthcare provider cannot receive an SMS or an email to their identity as a person without a device, a priority table of healthcare providers means, in practice, a priority table of the identifier of their personal devices, e.g. mobile phone number, which would fall under "device information".

Therefore, there is no error in the conclusion reached in the contested decision that features F1.8.1 and F1.8.2 are not novel.

1.5 Regarding feature F1.8.5, the appellants argued that since D3, page 514, left-hand column, last paragraph referred to the transmission of "alerts" and waiting for "acknowledgements to the corresponding alerts" [emphases added by the appellants], it had to be concluded that the alert was transmitted to more than one person and multiple acknowledgements were potentially received. The appellants considered this to be in line with Fig. 10 of D3; however, it can be seen in Fig. 10 that each time an alert is sent ("Send Alert" box), the system waits for an acknowledgement ("Check if ACK response" box). There is no plural here. It appears that the use of the plural "alerts" in the cited passage is to refer to the plurality of alerts which end up being sent as long as the loop in Fig. 10 runs without receiving an acknowledgement. The appellants argued that the board's interpretation of Fig. 10 would mean repeatedly sending the same alert to the first person in the priority table if no acknowledgement is received, which would make no sense. To the contrary, if the appellants' interpretation were to be followed, it would make no sense to carry out any "role matching" in D3. Page 514, left-hand column, last paragraph states that "alert notifications are [...] transmitted according to each person's priority". Therefore, the role matching in the event of a lack of acknowledgement (the loop from "[No ACK]" to the "Role matching" box in Fig. 10) can only be understood as sending an alert to the next person in the priority table if no acknowledgement is received. If an acknowledgement is received ([ACK] in Fig. 10), the

alert is not sent to other persons in the priority table and the procedure ends.

Therefore, there is no error in the conclusion reached in the contested decision that feature F1.8.5 is not novel, either.

1.6 Consequently, the subject-matter of claim 1 of the main request is not novel (Article 54(1) and (2) EPC).

2. Auxiliary request

2.1 Claim 1 of the auxiliary request has the additional features that the device information is indicative of the present location for each of the receiving devices and that the receiving devices are prioritized by proximity to the control device.

Since D3 does not disclose these additional features, claim 1 of auxiliary request 1 is novel.

2.2 However, the board agrees with the contested decision that D2 discloses (in particular paragraphs [0017] to [0019]) this alternative way of prioritizing devices within a group of devices and that the skilled person would combine D3 with D2 and arrive at the subject-matter of claim 1 of the auxiliary request without exercising inventive skill.

2.3 The appellants argued that the skilled person would not combine D2 with D3 because these two documents were based on incompatible approaches. While D3 taught predefined associations between urgency levels and priority within roles, D2 explicitly provided teaching leading away from such a predefined assignment (cf. D2, paragraph [0007], "always out of date"). Instead, D2

taught *ad hoc* selection of the nearest healthcare provider. Since there were no thresholds and no prioritization based on thresholds in the alert routing method in D2, either, the skilled person would not be motivated to combine D3 with D2. Even if they did, in D2 the healthcare providers were chosen according to their proximity to the origin of the alert (cf. D2, paragraph [0018]) and not according to their proximity to the control device, as claimed in claim 1 of the auxiliary request. Even if it were assumed that a device was assigned to each healthcare provider, this would have led to a method prioritizing receiving devices according to their proximity to the sensor device at which the alert was generated, not to the control device as claimed.

These arguments did not convince the board. Since both D3 and D2 are in the same technical field, D2 is an obvious candidate for the skilled person looking for a document disclosing an alternative to the way healthcare provider devices are prioritized within a group in D3. For the skilled person, paragraph [0007] of D2, which points out disadvantages of predefined assignments as taught in D3, would instead confirm D2 as a promising document in which to look for an alternative. As the appellants themselves emphasise, D2 teaches using proximity to the origin of the alert. The "origin of the alert" in D3, which is the starting point for assessing inventive step, is not the sensor device, which monitors and forwards a physiological signal, but the control device, which (if necessary) generates an alert after the received physiological signal is compared with thresholds. Therefore, the combination of D3 with D2 would indeed lead to prioritization of receiving devices by proximity to the control device.

2.4 Therefore, the subject-matter of claim 1 of the auxiliary request does not involve an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated