Internal distribution code:

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

Datasheet for the decision of 4 June 2019

Case Number: T 0700/16 - 3.5.05

Application Number: 06817734.4

Publication Number: 1958108

IPC: G06F19/00, G06F9/44

Language of the proceedings: EN

Title of invention:
SYSTEM AND METHOD FOR DETERMINING DRUG ADMINISTRATION INFORMATION

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

Headword:
Meal axes/HOFFMANN-LAROCHE

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no)
Remittal to the department of first instance - (no)

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 0700/16 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 4 June 2019

Appellant: (Applicant 1)	F. Hoffmann-La Roche AG Grenzacherstrasse 124 4070 Basel (CH)
Appellant: (Applicant 2)	Roche Diabetes Care GmbH Sandhofer Strasse 116 68305 Mannheim (DE)
Representative:	Naiu, Radu Mircea E. Blum & Co. AG Vorderberg 11 CH-8044 Zürich (CH)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 5 November 2015 refusing European patent application No. 06817734.4 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	A. Ritzka
Members:	E. Konak
	A. Jimenez

Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse the application for lack of an inventive step (Article 56 EPC) with regard to the following documents:

D1: WO 2005/081170 A2
D2: US 6 352 505 B1

II. Oral proceedings were held before the board.

III. The appellants requested that the decision be set aside and that a patent be granted on the basis of the main request, or, alternatively, on the basis of one of auxiliary requests 1 or 2, all filed with a letter dated 6 May 2019. They further requested that the case be remitted to the examining division for further prosecution.

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

"A system for determining drug administration information, wherein the drug is a blood glucose lowering drug or insulin, the system comprising:

an input device (18, 36) providing for user input of feed forward information in the form of meal-related information having the first parameter component corresponding to carbohydrate content and the second parameter component corresponding to an expected speed of overall glucose absorption from the meal by the user, and

a data storage device (16, 34) having stored therein a map correlating values of the first and second parameter components to drug administration information,

characterized by a processor (14, 32) responsive to user input of the feed forward information to determine corresponding drug administration information according to the map, and

wherein the input device (18, 36) and the processor (14, 32) are configured such that they provide a user with the ability to modify time and/or date stamp information that is associated with previously entered meal-related information,

wherein the system is configured such that it provides the user with the ability to modify previously entered meal-related information or to append new and more accurate information onto the previously entered meal-related information."

V. Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that its last paragraph was replaced by the following paragraphs:

"wherein the input device (18, 36) includes a display unit (20, 38),

wherein the processor (14, 32) is configured to control the display unit (20, 38) to display a graphical user interface (50; 52; 54; 56; 58; 60) having a first axis defined by values of the first parameter component and a second axis defined by values of the second parameter component, the graphical user interface (50; 52; 54; 56; 58; 60) providing for the user input of feed

forward information in the form of a user selection of a corresponding pair of values of the first and second parameter components, and

wherein the processor (14) is operable to determine whether a complete user input to the graphical user interface has been detected, and wherein the processor (14) is operable to time and date stamp the graphical user interface input and to enter the date and time stamped graphical user interface input into a database contained within the data storage device (16, 34) if the processor (14) detects that a complete user input to the graphical user interface has occurred."

VI. Claim 1 of auxiliary request 2 differs from claim 1 of the main request in that the paragraphs cited under V above were inserted before its last paragraph.

Reasons for the Decision

1. Main request

1.1 The contested decision considered the subject-matter of claim 1 of the main request to differ from the disclosure of D1 in the following three features:

(i) Using a map correlating values of the first and second parameter components (i.e. carbohydrate content and expected speed of overall glucose absorption) to drug administration information, in order to determine the drug administration information.

(ii) The user can modify the time or date stamp associated with previously entered meal-related information.

(iii) The user can modify previously entered meal-related information.

1.2 The board does not agree with the contested decision that D1 does not disclose feature (i). The system of D1 uses insulin prediction algorithms to calculate the insulin needed to control the blood sugar level of the user (page 4, lines 12 to 15; page 6, lines 11 to 14; claim 3; 19 in Figure 1). The prediction model used by these algorithms well qualifies as a "map", correlating values of parameters known about the user to the dosage of insulin to be administered. The appellants argued that D1 merely enumerated parameters which could be taken into account for insulin dosage prediction, but did not explain how these parameters were taken into account, i.e. that a correlation between certain parameters can be made. First, the map of claim 1 does not correlate between the parameters either, but between the parameters and drug administration information. Second, the fact that the system of D1 predicts the needed insulin dosage based on the enumerated parameters clearly means that it correlates these parameters to the correct dosage of insulin that should be administered. Therefore, feature (i) is not new.

1.3 Regarding features (ii) and (iii), the board is convinced by the appellants' argument that they cannot be regarded as juxtaposed features, contrary to what is asserted in the contested decision. Indeed, the fact that the examining division found both features to address "the risk of erroneous entries" (see points 10.4.2 and 10.4.3 of the contested decision) speaks against its starting premise that these two features are not interrelated.

1.4 The appellants argued that the examining division's use of the word "erroneous" in its analysis hints at an "unintentional wrong input" or action of the user. The appellants submitted that "in contrast to this, the present invention relates to an intended correct input at the time of performing the input and to an intended correction as an adjustment based on actions emerging later in time". The "intention" of the user is, however, irrelevant for the problem at hand. It is a simple matter of daily experience that one does not necessarily eat what one thinks one will eat or when one thinks one will eat. Any entry to a system concerning the time and food content of a future meal can be a mere estimate and is inherently prone to change, irrespective of the user's intentions. The fact that D1 does not discuss this matter does not change this everyday fact, and it does not involve an inventive step to implement in the system of D1 what daily experience readily requires from such a system.

1.5 The appellants argued at the oral proceedings that the system of D1 is a simple mobile device which delivers the input data to a remote server where data from patients is accumulated in a large database for use in pharmaceutical research. Although D1 states that the users are provided with predictions of insulin dosage to control their blood sugar, it can be read between the lines that this is indeed an incentive for users to provide their data for pharmaceutical research. Once data is uploaded to the server, it cannot be retrieved and modified by the user. It would be against the teaching of D1 to let users modify data, as inexperienced users could make incorrect modifications and corrupt valuable data collected for scientific research. Data collected in D1 is thus immutable and cannot provide useful predictions for the future.

1.6 It is however clear that D1 relates primarily to a system to assist diabetes patients with their blood glucose control. Potential use of data captured from users in clinical trials or research is mentioned only as a secondary aspect in D1. Further, the board cannot accept why the modification of data by users should be more error-prone and hence undesirable when it is the users themselves who enter the data in the first place. Given that neither claim 1 of the main request nor the description refers to any difficulty overcome in database technology in order to enable the user to modify data, the appellants' arguments fail to convince the board.

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

2. Auxiliary request 1

2.1 The distinguishing features of claim 1 of auxiliary request 1 with respect to D1 are, in addition to features (i) and (ii) of claim 1 of the main request, the following:

(iv) A graphical user interface with two axes is displayed on which the user can input the first and the second parameters.

(v) Time and date stamping of the user input upon detection of a complete user input.

2.2 The board agrees with the contested decision, and the appellants did not contest that these features have no synergistic effect.

2.3 The appellants questioned at the oral proceedings whether D1 disclosed a graphical user interface at all. This is beyond doubt, however, as D1 discloses in several passages on page 5, e.g. lines 14 to 15, that the user can select the data they enter by selecting from a menu structure.

2.4 Regarding feature (iv), the appellants submitted that the claimed type of graphical user interface accelerates user input, as the relevant parameters can be selected at the same time and in mutual dependence, whereas the prior art describes only a serial way of inputting parameters. This is particularly important for diabetes patients who may need an urgent insulin injection and thus need to enter data as fast as possible. Instead of lengthy procedures like typing the required data or selecting from several menus as suggested in D1, this feature enables the user to make an entry with one single input on the axes. This alleged effect is, however, neither derivable from the wording of the claim, which does not specify the number of user selections required on the graphical user interface to select a pair of values, nor supported by the description: the embodiment on page 31, lines 11 to 15, explicitly "requires three separate selections to be input by the user". Furthermore, even if this effect were present, it would not qualify as an objective technical effect which could solve an objective technical problem, as the alleged improvement in the speed of user input inevitably depends on the cognitive skills of the user in interpreting a diagram with two axes representing different parameters. This is indeed admitted by the application documents themselves; in particular, page 58, lines 15 to 27 states that "no particular one of the graphical user interfaces illustrated and described herein above with respect to

FIGS. 2-7 will be usable by all patients. Because habits, personal preferences and the like typically vary among patients, one or more of the graphical user interfaces may be well suited for some patients while others of the graphical user interfaces will be best suited for other patients." Therefore, feature (iv) does not contribute to an inventive step.

2.5 Regarding feature (v), D1 discloses that the system captures data relevant to the diabetes management of the user, including "exact time of any event" (page 3, lines 25 to 28). It is obvious that this must include the exact time of any meal intake. The selection of the time at which the user completes their input on the graphical user interface, which clearly plays no role in glucose metabolism, for timestamping is arbitrary. Therefore, feature (v) does not contribute to an inventive step either.

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

3. Auxiliary request 2

3.1 Claim 1 of auxiliary request 2 is a combination of claim 1 of the main request and claim 1 of auxiliary request 1.

3.2 The appellants' only argument in favour of this particular request was submitted in the statement setting out the grounds of appeal. The appellants argued that an erroneous input of the time stamp was ruled out by the combination of features in claim 1 of auxiliary request 2, as the processor automatically added a timestamp as soon as the user had completed

their input on the graphical user interface. The board is not convinced by this argument, since the time at which a user completes their input on a graphical user interface has no relationship whatsoever to the time at which they eat.

3.3 Therefore, the subject-matter of claim 1 of auxiliary request 2 does not involve an inventive step (Article 56 EPC).

4. Request for remittal to the examining division for further prosecution

4.1 At the end of the oral proceedings before the board, the appellants requested that the case be remitted to the examining division for further prosecution. They submitted that they did not attend the oral proceedings scheduled before the examining division after getting a negative preliminary opinion with respect to the allowability of their latest requests in a telephone interview with the first examiner, and decided rather to have their case heard by the board. In their opinion, it did not make sense to attend oral proceedings before an examining division which already had an established opinion. The examining division relied on common general knowledge for which it failed to provide documentary evidence.

4.2 The board refuses this request for the following reasons: the appellants have deliberately chosen not to attend oral proceedings before the examining division, they have raised no objection in respect of a substantial procedural violation during examination proceedings, and they had their complete case examined by the board before they requested the remittal to the examining division. The board has already examined all

three of the appellants' requests based on the documents available on file and does not see any need for further documents. The board has concluded on all requests. The appellants submitted that they had no further request with a set of claims. Thus, the appellants' request for remittal amounts to a request to reopen examination proceedings after the decision of the board. This is contrary to the nature of appeal proceedings in which the board takes a final decision on substantial issues.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated