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Datasheet for the decision of 2 September 2015

Case Number: T 0336/14 - 3.5.05

Application Number: 04769327.0

Publication Number: 1668556

IPC: G06F19/00, A61M1/14, A61M1/16, A61M1/36

Language of the proceedings: EN

Title of invention:
A user interface for an extracorporeal blood treatment machine

Patent Proprietor:
Gambro Lundia AB

Opponent:
Fresenius Medical Care Deutschland GmbH

Headword:
Presentation of operating instructions/GAMBRO

Relevant legal provisions:
EPC Art. 52(2)(d), 56
RPBA Art. 13(1), 13(3)

Keyword:
Admission of late-filed auxiliary requests - (yes)
Inventive step of "mixed invention" - (no)

Decisions cited:
T 0115/85, T 0119/88, T 0362/90, T 0887/92, T 0599/93, T 1194/97, T 0619/98, T 0641/00, T 0643/00, T 0928/03, T 0154/04, T 1073/06, T 1143/06, T 1704/06, T 1749/06, T 0528/07, T 1741/08, T 0407/11

Headnote:

In the assessment of inventive step of a claim which comprises technical and non-technical features ("mixed invention") and in which the non-technical features relate to cognitive content presented to the user of a graphical user interface (GUI), i.e. relate to "what" is presented rather than "how" something is presented, it has to be analysed whether the GUI together with the content presented *credibly* assists the user in performing a *technical* task (related to "why" that content is presented) by means of a continued and/or guided human-machine interaction process (see point 1.2).

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Case Number: T 0336/14 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 2 September 2015

Appellant: (Opponent)	Fresenius Medical Care Deutschland GmbH Else-Kröner-Strasse 1 61352 Bad Homburg (DE)
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Respondent: (Patent Proprietor)	Gambro Lundia AB Magistratsvägen 16, Box 10101 220 10 Lund (SE)
Representative:	Ponzellini, Gianmarco PGA S.r.l. Via Mascheroni, 31 20145 Milano (IT)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 9 December 2013 concerning maintenance of European Patent No. 1668556 in amended form.**

Composition of the Board:

Chair	A. Ritzka
Members:	K. Bengi-Akyuerek
	D. Prietzel-Funk

Summary of Facts and Submissions

I. The appeal is against the interlocutory decision of the opposition division to maintain the opposed European patent as amended according to the claims of a main request (i.e. claims 1 to 16), in view of the invoked opposition grounds of lack of novelty and inventive step (Article 100(a) EPC in conjunction with Articles 54 and 56 EPC) and added subject-matter (Article 100(c) EPC in conjunction with Article 123(2) EPC).

II. The decision under appeal referred to the following prior-art documents:

D2: WO-A-02/26286;
D3: US-B-6 361 518.

III. With the statement setting out the grounds of appeal, the appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked on the grounds of lack of inventive step under Article 56 EPC, having regard to D2 only. Furthermore, it provided arguments and references to the relevant case law of the Boards of Appeal in support of lack of inventive step. In particular, the appellant referred to the "COMVIK approach" (T 641/00) and further quoted decisions T 833/91, T 599/93, T 1194/97, T 1073/06, T 1704/06, T 1749/06, T 528/07 and T 1741/08.

IV. By its letter of reply dated 18 August 2014, the respondent (patent proprietor) requested that the appeal be dismissed and that the patent be maintained on the basis of the claims of the main request underlying the interlocutory decision. Moreover, it submitted counter-arguments and discussed the case law

cited by the appellant. In addition, the respondent quoted decision T 119/88 in support of the presence of inventive step of the subject-matter claimed.

V. In an annex to the summons to oral proceedings pursuant to Article 15(1) RPBA, the board gave its preliminary opinion on the appeal. In particular, observations were made on the question of inventive step in view of D2.

VI. By letter dated 31 July 2015, the respondent filed new sets of claims according to auxiliary requests I to III, without commenting in substance on the board's communication under Article 15(1) RPBA.

VII. With its letter of reply, the appellant expanded upon its arguments as to lack of inventive step regarding the main request, and requested that the late-filed auxiliary requests not be admitted into the appeal proceedings.

VIII. Oral proceedings were held as scheduled on 2 September 2015, during which all the claim requests of the respondent were admitted into the appeal proceedings and discussed. The appellant additionally quoted in particular decision T 1143/06 in support of lack of inventive step of the subject-matter claimed, whilst the respondent further cited decisions T 643/00 and T 928/03 to back up the presence of inventive step.

The appellant's final request was that the decision under appeal be set aside and that the patent be revoked.

The respondent's final request was that the appeal be dismissed (main request), or, alternatively, that the patent be maintained in amended form on the basis of

the claims of auxiliary requests I to III, submitted with the letter dated 31 July 2015.

At the end of the oral proceedings, the decision of the board was announced.

IX. Claim 1 of the **main request** reads as follows:

"A user interface for an extracorporeal blood treatment machine, which user interface comprises at least one touch screen, at least one memory containing at least two images, and at least a controller programmed for displaying on a screen (16) of the touch screen at least one display; at least two distinct areas (161) and (162) being included in the at least one display, a first area (161) of the two distinct areas exhibiting at least two touch keys (17), wherein the controller is further programmed for:

- detecting activation of the at least two touch keys (17);
- displaying in a second area (162) of the at least two areas of the at least one display, a first of the at least two images, when a first of the at least two touch keys is activated;
- displaying in the second area (162) of the at least two areas of the at least one display, a second of the at least two images, when a second of the at least two touch keys is activated;

characterized in that:

- the memory comprises a plurality of data relating to the machine and the controller is programmed to display the data on the first area (161) of the at least one display, each

item of the data being displayed in a visually associated position to a touch key of the at least two touch keys (17);
- the plurality of data comprises operating instructions for readying the machine for use;
- the at least two images are pictographs which represent configurations of the machine correlated to the operating instructions."

Claim 1 of **auxiliary request I** reads as follows:

"A process for assisting an operator in readying a machine for extracorporeal blood treatment, wherein the machine comprises at least one user interface wherein the user interface comprises a touch screen, at least one memory containing at least two images, and at least a controller programmed for displaying on a screen (16) of the touch screen at least one display; at least two distinct areas (161 and 162) being included in the at least one display, a first area (161) of the two distinct areas exhibiting at least two touch keys (17), wherein the controller is further programmed for:

- detecting activation of the at least two touch keys (17);
- displaying in a second area (162) of the at least two areas of the at least one display, a first of the at least two images, when a first of at[sic] the least two touch keys is activated;
- displaying in the second area (162) of the at least two areas of the at least one display, a second of the at least two images, when a second of the at least two touch keys is activated; wherein:

- the memory comprises a plurality of data relating to the machine and the controller is programmed to display the data on the first area (161) of the at least one display, each item of the data being displayed in a visually associated position to a touch key of the at least two touch keys (17);
- the plurality of data comprises operating instructions for readying the machine for use;
- the at least two images are pictographs which represent configurations of the machine correlated to the operating instructions;

and wherein the process comprising stages of

- displaying on the screen (16) of the touch screen the at least one display in which said at least two distinct areas are described, the first area (161) of the at least two areas exhibiting said at least two touch keys (17), each of which at least two touch keys (17) is associated to at least one operational instruction for readying the machine;
- touching one of the at least two touch keys (17) located in the first area (161) in order to make a selection of at least one operating instruction associated to the one of the at least two touch keys (17);
- displaying, in response to the selection, a pictograph on the second area (162) of the two areas of the display; the pictograph depicting a configuration of the machine correlated to the at least one operating instruction;
- displaying pictographs which are at least partly different one from another, alternately and not contemporaneously on the second area (162) of the display, in accordance with a selected touch key (17);

- contemporaneously displaying, in the first area (161) of the display, a plurality of the operating instructions, and keeping the operating instructions on-screen following activation of a touch key (17) of the touch keys."

Claim 1 of **auxiliary request II** comprises all the features of claim 1 of the main request, and includes the following phrase at its end:

"and in that the controller is programmed to visually modify at least a part of the at least one display in response to a[sic] performing of at least one of the operating instructions."

Claim 1 of **auxiliary request III** comprises all the features of claim 1 of auxiliary request I, and includes the following phrase:

"and wherein the controller is programmed to visually modify at least a part of the at least one display in response to performing of at least one of the operating instructions".

Reasons for the Decision

1. MAIN REQUEST

Claim 1 of this request is identical to claim 1 of the main request as maintained by the opposition division, and comprises the following features (as enumerated by the appellant and the respondent):

1.0) A user interface for an extracorporeal blood

treatment machine,

1.1) the user interface comprising at least one touch screen,

1.2) at least one memory containing at least two images,

1.3) at least a controller programmed for displaying on a screen of the touch screen at least one display,

1.4) at least two distinct areas being included in the at least one display;

1.5) a first area of the two distinct areas exhibiting at least two touch keys;

1.6) wherein the controller is further programmed for:

- detecting activation of the at least two touch keys;

1.7) - displaying in a second area of the at least two areas of the at least one display, a first of the at least two images, when a first of the at least two touch keys is activated;

1.8) - displaying in the second area of the at least two areas of the at least one display, a second of the at least two images, when a second of the at least two touch keys is activated;

1.9) wherein the memory comprises a plurality of data relating to the machine;

1.10) the controller being programmed to display the data on the first area of the at least one display;

1.11) each item of the data being displayed in a visually associated position to a touch key of the at least two touch keys;

1.12) the plurality of data comprising operating instructions for readying the machine for use;

1.13) the at least two images being pictographs which represent configurations of the machine correlated to the operating instructions.

It was undisputed during the appeal proceedings that document D2, concerned - like the present invention - with pre-treatment preparation steps for a blood treatment machine, represents the closest prior art for the claimed subject-matter. Whilst in the opposition proceedings (see e.g. the notice of opposition, section V.1) the appellant referred mainly to the embodiment of D2 relating to Figures 30A to 30L (corresponding to the machine initialisation procedure, including visual operating instructions) as a basis for attacking the patent's subject-matter, in the appeal proceedings it relied essentially on the embodiment relating to Figures 32A to 32E of D2 (corresponding to the machine set-up procedure). The board likewise regards the latter embodiment as a suitable starting point for assessing the patentability of the present subject-matter.

1.1 Article 54 EPC: novelty

The board judges that claim 1 of the main request meets the requirements of Article 54 EPC, for the following reasons:

1.1.1 It was common ground that D2 anticipates features 1.0) to 1.4) of claim 1. Document D2 depicts in Figure 1 (see also page 29, line 15 to page 30, line 28) a "system user interface 50" for operating a "blood perfusion system 1" with a touch screen ("main display 54"). Figure 27 of D2 further shows that display 54 is divided into regions 200, 220 and 240, while Figure 30A illustrates that the third region 240

of display 54 is further split into an area including seven touch-screen tabs ("tabbed area") on the left-hand side of the display and an area corresponding to a context-driven portion 243 ("context area") on the right-hand side of the display (see also D2, page 85, lines 2-15). The board agrees with the appellant that those display portions correspond to the distinct display areas as claimed. Thus, in accordance with the respondent's definition of distinct display areas, those portions are in fact "subparts of one display which the user is able to visually distinguish the one from the other" (cf. respondent's letter dated 18 August 2014, section III.1.a, second paragraph). Moreover, Figures 32A to 32E of D2 also demonstrate that at least two images must be displayed and thus stored in the machine's memory.

1.1.2 As to features 1.5) to 1.8), Figures 32A to 32E of D2 include at least two touch keys (i.e. tabs 242, 244, 246, 248, 250, 252 and 254) in the tabbed area of display 54 and depict that, depending on the tab selected, different images show up in the context area of display 54. The respondent argued that there was in reality no first area having at least two touch keys in those figures, because each unselected tab defined a separate area (made up of a main portion and a protruding tab) delimited by its own border and pertaining to a respective card of a card catalog formed by a stack of overlapping cards with staggered tabs. Hence, upon tab selection, the selected tab was no longer part of the first area and the triggered image was not located in the second area, but rather on a new, freshly uploaded display area defined by the selected card. However, in the absence of any further definition of the distinct first and second areas in present claim 1, in particular as to whether or not

they are associated with overlapping cards with staggered tabs delimited by their own borders, the above interpretation of D2 appears to be too contrived and speculative. Rather, according to Figures 32A to 32E of D2, the first and second areas remain distinguishable from one another and the tabs selected still remain part of the first area even after touch key activation, as allegedly implied by features 1.5) to 1.8) of claim 1. Hence, the board holds that, contrary to the respondent's view, the corresponding display of D2 falls perfectly within the terms of features 1.5) to 1.8).

1.1.3 As to features 1.9) to 1.11), Figures 32A to 32E of D2 demonstrate that various titles ("MAIN", "A-V", "CPG", "SUCTION/FLUIDS", "GASES", "WAVEFORMS" and "SETTINGS") are indicated on the individual tabs in the tabbed area of display 54 and that those identifiers are all located central, i.e. in a visually associated position, to the seven tabs in the tabbed area within a homogenous data arrangement. The respondent submitted that the tab identifiers were not "data relating to the machine" within the meaning of features 1.9) to 1.11), but simply labels for identifying sub-menus containing further information. The board, however, takes from the description of D2 (see e.g. page 85, line 16 to page 86, line 21) that the tab identifiers are evidently related to different aspects of the corresponding blood perfusion machine (e.g. "A-V" relating to its arterial and venous circuits; "CPG" relating to the cardioplegia circuit; "SUCTION/FLUIDS" relating to the suction and left ventricular circuits). Consequently, in view of the broad meaning of the term "data relating to the machine", the labels used in Figures 32A to 32E are considered to qualify as such data. The board therefore agrees with the appellant

that D2 likewise anticipates features 1.9) to 1.11) of claim 1. In summary, the board concludes that features 1.0) to 1.11) are known from D2.

1.1.4 As to features 1.12) and 1.13), Figures 32A to 32E of D2 merely exhibit that, upon activating one of the tabs identified by the tab labels in the tabbed area, distinct pictographs are automatically displayed in the context area of display 54, representing configurations of the machine correlated to the corresponding tab labels. Therefore, the board concurs with the appellant and the respondent that the embodiment relating to Figures 32A to 32E of D2 fails to directly and unambiguously disclose features 1.12) and 1.13) of present claim 1, namely that the data displayed in the display's first area comprises operating instructions for readying the machine for use and that the images displayed in the display's second area are pictographs which represent configurations of the machine correlated to the operating instructions. Thus, distinguishing features 1.12) and 1.13) correspond to *different* contents of the information shown in the first area, namely "operating instructions for readying the machine for use" rather than tab identifiers for controlling the machine's configuration parameters as in D2.

The question which arises next is whether or not those distinguishing features constitute *presentations of information as such* within the meaning of Article 52(2)(d) and (3) EPC and thus are non-technical features which do not contribute to the technical character of claim 1. The board is aware of decisions which propose the concept of "technical novelty" (see e.g. G 2/88, OJ EPO 1990, 93, reasons 7; T 154/04, OJ EPO 2008, 46, reasons 14; T 619/98 of 23 April 1999, reasons 4.8).

However, in the sequel, it follows - in accordance with the appellant's line of attack - the well-established approach of treating potentially non-technical features under the umbrella of inventive step (see e.g. T 641/00, OJ EPO 2003, 352, reasons 4).

1.1.5 Accordingly, the subject-matter of claim 1 of the main request is held to be novel over D2 (Article 54 EPC).

1.2 Article 56 EPC: inventive step

The next issue to be resolved is whether distinguishing features 1.12) and 1.13) may render the subject-matter of claim 1 inventive over the corresponding embodiment of D2. The appellant and the respondent quoted a large number of decisions (cf. points III, IV and VIII above) regarding the assessment of inventive step, in particular the matter of *presentations of information as such* with respect to graphical user interfaces. The board finds it expedient to first look at the factual and legal particularities of those decisions.

1.2.1 *Discussion of the cited decisions of the Boards of Appeal*

The decisions cited, as far as relevant for the present case, can be summarised as follows:

In case **T 599/93** of 4 October 1996, the underlying GUI was configured to simultaneously display multiple images via separate windows divided by demarcation lines to ease the user's effort in evaluating images and to raise his attention to specific image contents via e.g. different colours or brightness. The contribution of the claimed subject-matter over the prior art was to allow the user to dynamically move the

demarcation lines via a window setting mark. The deciding board held that the information displayed by the respective windows did not e.g. convey any operating states of the computer system and thus had no technical character (cf. reasons 4).

In case **T 1194/97** (OJ EPO 2000, 525), a picture retrieval system was configured to display a coded picture composed of consecutive picture lines being recorded on a record carrier. The deciding board considered it *"appropriate to distinguish ... between data which encodes cognitive content, eg a picture, in a standard manner and functional data defined in terms which inherently comprise the technical features of the system ... in which the record carrier is operative"* (cf. reasons 3.3).

In case **T 1073/06** of 23 November 2010, the underlying GUI was configured, upon user input, to display objects of a simulation model, including graphical link representations to improve the ease of a user's comprehension of the model. The contribution of the claimed subject-matter to the prior art was related to the utilisation of association data stored in the memory to cause the link between the objects in the simulation model to be displayed with the associated graphical link representation. The deciding board held that *"an improvement in the comprehension of a model is a purely mental effect, so that the problem solved is not seen as being technical ... The claimed 'graphical link representations' relate to the state of the simulation model, rather than to the state of the claimed simulation apparatus, and thus constitute presentations of information and are therefore also non-technical"* (cf. reasons 5.3 and 5.4).

In case **T 1704/06** of 14 December 2007, the GUI of a casino game was configured, upon user input, to display the players' betting and total payout data to verify the payout calculations. The deciding board held that verifying the croupier's calculations was *"clearly not a technical issue but a matter of trust in the croupier (or the lack of it)"* (cf. reasons 2.2, third paragraph).

Lastly, in case **T 528/07** of 27 April 2010, the underlying GUI was configured, upon user input, to display business opportunity information with communication channels appearing as boxes on the display screen to facilitate the exchange of business data. The deciding board held that business opportunity data *"are meaningful only to the human mind"* and that the channels relate to *"the manner information is displayed, something which is normally regarded as non-technical"* (cf. reasons 5.4 and 6.1).

1.2.2 At the outset of its inventive-step analysis, this board would first like to recall that features relating to subject-matter excluded under Article 52(2) EPC, such as "presentations of information", may only contribute to an inventive step if they bring about an overall technical effect, i.e. if they contribute to the technical character of the claim by interacting with its technical features to solve a technical problem. Otherwise, they are to be disregarded in the assessment of inventiveness (see e.g. T 641/00, first headnote and reasons 6; T 154/04, reasons 5(F); T 1143/06 of 1 April 2009, reasons 3.4). This is, in principle, also applied in prominent national decisions of the German Federal Court of Justice (BGH) concerned with the matter of "presentations of information" (see e.g. BGH, X ZR 3/12, GRUR 2013, 275 - Routenplanung,

reasons III.2; BGH, X ZR 27/12, GRUR 2013, 909 - Fahrzeugnavigationssystem, reasons III.2) and the Court of Appeal of England and Wales dealing with "programs for computers" (see Court of Appeal decision of 8 October 2008 - Symbian Ltd v. Comptroller General of Patents [2008] EWCA Civ 1066, point 15).

In this regard, the respondent, referring to T 119/88 (OJ EPO 1990, 395, reasons 4.1), is right in saying that, in the assessment of whether or not a feature provides a technical contribution, the feature shall not be taken by itself, but its technical character shall be decided by the effect it brings about after being added to an object which did not comprise that feature before. Therefore, the board has to determine whether or not the distinguishing features of claim 1 bring about a credible technical effect and hence solve a technical problem.

1.2.3 It is immediately apparent that the information presented according to features 1.12) and 1.13) of claim 1, i.e. the operating instructions and the corresponding pictographs, are *cognitive* rather than *functional* data in the sense of T 1194/97, since they address directly the user of the blood treatment machine and are consequently meaningful only to a human mind. It is also evident that, contrary to the respondent's view, the distinguishing features are related to the *content* of the information, i.e. to "what" is presented, rather than to the *manner* in which the information is presented, i.e. to "how". The details of "how", i.e. displaying pictographs in the second area correlated to the visually associated machine-related data (i.e. tab labels) displayed in the first area, are already known from D2 (see point 1.1.4 above). Accordingly, those decisions which are related

predominantly to the *manner* of presenting specific content, are of little relevance for ruling on the present case (i.e. decisions T 643/00, T 928/03, T 1143/06, T 1749/06 and T 1741/08). As to the applicability of decisions T 643/00 and T 928/03 to the present case, the board refers to point 1.2.6 below.

1.2.4 The next question to be answered is whether the underlying user interface and the content presented *credibly* assist the user in performing a *technical* task by means of a continued and guided human-machine interaction process. So, this question is basically related to "why" (i.e. "for what purpose") the content is presented.

To this end, as implied e.g. by decisions T 599/93 (reasons 4) and T 1073/06 (reasons 5.4), it is relevant to determine whether the cognitive information presented constitutes an operation state, a condition or an event internal to the underlying technical system, prompting the system user to interact with it in a continued and/or guided way for enabling its proper functioning, within the meaning of T 115/85 (OJ EPO 1990, 30, headnote I), T 362/90 of 13 October 1992 (see reasons 4.1) and T 887/92 of 19 April 1994 (see reasons 3.1), or, whether it represents a state of a non-technical application run on that technical system (e.g. the state of a simulation model as in T 1073/06, reasons 5.4; betting states in a casino game as in T 1704/06, reasons 2.2; business conditions as in T 528/07, reasons 5.4). In other words, it has to be established whether the information presented constitutes "technical information", which credibly enables the user to properly operate the underlying technical system and thus has a technical effect, or rather "non-technical information", which is

exclusively aimed at the mental activities of the system user as the final addressee.

1.2.5 In the present case, the operating instructions (and the corresponding pictographs) may admittedly somehow support the user in operating the underlying technical device, namely the blood treatment machine. Hence, in a very broad sense, those data could at least linguistically be construed as "technical information", as the respondent suggested. However, not everything that supports a technical task has itself a technical character (cf. T 1741/08, reasons 2.1.12). Rather, the information of features 1.12) and 1.13) is evidently not related at all to any internal system state concerning the proper functioning of the underlying machine in the sense of T 115/85, let alone to a desirable or valid state within the meaning of T 362/90 or T 887/92. Thus, in accordance with T 1143/06 (see reasons 3.4), making reference to T 619/98, an action (possibly) performed by a user in response to a message concerning the technical functioning of an apparatus does not necessarily render technical the information conveyed. The board also agrees with the appellant (referring to T 1143/06, reasons 5.2) that the mere use of an electronic screen, instead of a piece of paper, for conveying information to the user does not make the information displayed *more* technical, so that the claimed display of operating instructions could well, without changing the resulting overall effect, be replaced with a technical manual on paper through which the readers may flip as they please.

As to the "why" issue, the respondent argued at the oral proceedings before the board that the technical task underlying claim 1 was to "help a nurse in setting up the blood treatment machine in a safe and efficient

way". This was done by providing "enhanced information" according to features 1.12) and 1.13) on a small-size display screen, referring to page 16, second paragraph of the description as originally filed (*"In the illustrated embodiment, in which the touch-screen is 12 inches with 800x600 pixel, the resolution of the second area 162 of the screen, which ... occupies an area of 250*405 pixel, is about 83 pixels per inch"*). In that context, the board would first like to point out that claim 1 in general and its distinguishing features in particular are not limited to any size of the display screen or to any resolution of the content presented. Furthermore, the board notes that the content presented, i.e. operating instructions (and the corresponding pictographs), constitutes pre-stored static information according to the present invention. Hence, neither is the selection of any operating instruction by a user activating the corresponding touch key conditional on any instant internal state of the blood treatment machine, nor does the automated display of the respective pictograph provide any details on the current operating state of the machine. Since, according to the wording of claim 1, the user may activate any touch key associated with any operating instruction at any time, there is even no temporal order to be observed with regard to those instructions, paving the way for any type of misuse on the part of the user and resulting maloperation of the machine, contrary to the alleged aim of a safe and efficient machine set-up.

As a consequence, the information provided according to features 1.12) and 1.13) cannot credibly support a continued and guided human-machine interaction process. Thus, it cannot assist the user in performing the above-mentioned technical task. The board concludes

that displaying that information may, at most, aid the user in better comprehending and/or memorising the steps to be taken for setting up the blood treatment machine or, as the respondent put it, facilitate understanding of the steps required for proper machine preparation, minimise errors of interpretation or improve the "average user's" intelligibility about what he is supposed to do during the various machine set-up phases. Hence, it only addresses the human mental process of an "average user", however the latter is supposed to be defined based on personal skills and preferences (see e.g. T 407/11 of 10 April 2014, reasons 2.1.4). Contrary to the respondent's view, this must be considered a non-technical effect.

In that respect, the board cannot follow the logic of the decision under appeal, according to which the distinguishing features are not non-technical, apparently for the sole reason that the corresponding machine's memory storing the operating instructions to prepare the machine for use was a "technical entity" and was "technically changed by entering said specific data" (cf. appealed decision, section 13.1). But this "phenomenon" regarding a computer memory would certainly also hold true for entering, for example, purely business-related data into that memory, which would not however bring about a technical effect other than storing that non-technical data by technical means. It therefore appears to the board that the above reasoning of the opposition division is more concerned with the presence of an "invention" within the meaning of Article 52(2) and (3) EPC rather than with detecting non-technical features within the framework of assessing inventive step under Article 56 EPC (see e.g. Guidelines for Examination in the European Patent Office, September 2013, G-II, 2 and G-VII, 5.4).

Hence, distinguishing features 1.12) and 1.13) constitute *presentations of information as such*, which, according to the established jurisprudence of the Boards of Appeal, cannot be taken into account in the assessment of inventiveness.

1.2.6 At the oral proceedings before the board, the respondent cited and discussed in particular decisions T 643/00 and T 928/03 to underpin the technicality of features 1.12) and 1.13) and the presence of inventive step of claim 1.

In case **T 643/00** of 16 October 2003, the underlying GUI was configured, upon a user instruction, to simultaneously display hierarchically encoded image data in a side-by-side manner at a low resolution to make the search process easier for the user. The distinguishing features of the corresponding independent claims were considered to relate essentially to resolution-based image arrangements in separate portions of the display. The objective technical problem was seen as "providing a technical tool for efficient search, retrieval and evaluation of images stored in an image processing apparatus" (cf. reasons 14). Based on that, and in view of the available prior art, the presence of inventive step was acknowledged.

In case **T 928/03** of 2 June 2006, the GUI of an interactive video soccer game was configured to display various guide marks to draw the user's attention to different (concealed) points of interest of the display screen. The decisive distinguishing features of the independent claims were considered to consist in displaying pass guide marks at predetermined locations of the screen so as to properly indicate the direction

in which the game medium (i.e. ball) is to be passed by the active soccer player. The objective technical problem was to resolve conflicting technical requirements, namely "[o]n the one hand, a portion of an image is desired to be displayed on a relatively large scale (e.g. zoom in); on the other hand, the display area of the screen may then be too small to show a complete zone of interest" (cf. reasons 4.3). In view of the above distinguishing feature and the available prior art, the deciding board acknowledged the presence of inventive step.

As regards the interpretation of those decisions, the board fully agrees that the mere fact that mental activities on the part of the user are involved does not necessarily qualify subject-matter as non-technical. It is also true that the claims underlying those cases do indeed solve *technical* problems. However, the solution according to present claim 1 is not directed to resolution-based image arrangements (as in T 643/00) or to displaying guide marks at certain locations of the screen (as in T 928/03). In particular, the distinguishing features established in those cases, unlike features 1.12) and 1.13) of present claim 1, are related to "how" something is presented rather than "what" is presented (see also point 1.2.3 above). Neither are distinguishing features 1.12) and 1.13) intended to solve the problem of an efficient search, retrieval and evaluation of images or resolving conflicting requirements with regard to the desired size of the displayed area of interest. Thus, in view of those factual differences alone, cited decisions T 643/00 and T 928/03 are not considered to be applicable to the present case. Moreover, the board is not persuaded by the respondent's argument that the data structure

underlying features 1.10) to 1.13) involved an inventive step, since such a visualised data structure is already disclosed in D2 (see e.g. Figure 32A), as the appellant rightly argued.

1.2.7 In view of the foregoing, the board holds that the subject-matter of claim 1 of the main request does not involve an inventive step having regard to D2.

1.3 In conclusion, the main request is not allowable under Article 56 EPC.

2. AUXILIARY REQUEST I

Claim 1 of this request combines the features of process claim 16 as granted (i.e. claim 15 as maintained) with the structural features of apparatus claim 1 as granted and maintained. It differs from claim 1 of the main request essentially in that it is now directed to a "process for assisting an operator in readying a machine for extracorporeal blood treatment", and further specifies that

1.14) the pictographs are at least partly different one from another and are displayed alternately and not contemporaneously;
1.15) the operating instructions are displayed contemporaneously and kept on-screen following activation of a touch key (emphasis added by the board).

The board accepts that those amendments are supported by claims 1, 4, 7, 18 and 19 of the present application as filed and that they further limit the scope of claim 1 as granted. Therefore, contrary to the appellant's view, the board is satisfied that the

requirements of Article 123(2) and (3) EPC are met.

2.1 *Admission into the appeal proceedings*

The claims of this auxiliary request were filed for the first time with the respondent's letter of reply to the summons to oral proceedings before the board. The board decided to admit this auxiliary request into the appeal proceedings under Article 13(1) and (3) RPBA, since it considers that the amendments made to claim 1 did not raise complex issues, so that the board and the appellant could deal with them without having to adjourn the oral proceedings.

2.2 Article 52(1) EPC: novelty and inventive step

2.2.1 The feature analysis of claim 1 of the main request set out in point 1.1 above applies *mutatis mutandis* to claim 1 of this auxiliary request.

2.2.2 Moreover, as regards features 1.14) and 1.15), Figures 32A to 32E in conjunction with page 107, line 6 to page 110, line 27 of D2 also demonstrate that the pictographs displayed in the context area of display 54 according to the tab selected are different from each other and that the tab labels, following activation of a tab, are still displayed contemporaneously and remain on the screen. Again, the only difference compared with claim 1 consists in that those figures of D2 do not exhibit operating instructions for readying the machine for use, as opposed to features 1.12), 1.13) and 1.15).

2.2.3 The respondent argued at the oral proceedings before the board that D2, in particular its embodiment based on Figures 32A to 32E, was not related to a *process* for readying a blood treatment machine for use. However,

the board finds that the teaching of D2 that the corresponding tabs of Figures 32A to 32E may be selected at any time during set-up or bypass *procedures* for executing the respective user control steps (see D2, page 85, line 13 to page 86, line 21) sufficiently demonstrates that D2 likewise encompasses a process for readying a blood treatment machine as claimed.

2.2.4 Hence, the observations regarding the main request set out in points 1.2.3 to 1.2.6 above with respect to obviousness apply *mutatis mutandis* to claim 1 of the present request.

2.2.5 Accordingly, the subject-matter of claim 1 of this auxiliary request does not involve an inventive step having regard to D2.

2.3 In summary, auxiliary request I is also not allowable under Article 56 EPC.

3. AUXILIARY REQUESTS II and III

Claim 1 of these auxiliary requests differs from claim 1 of the main request or auxiliary request I only in that it further specifies that

1.16) the controller is programmed to visually modify at least a part of the at least one display in response to performing of at least one of the operating instructions (emphasis added by the board).

Feature 1.16) is based on page 16, lines 25-27 and claim 8 of the application as filed and further limits the scope of claim 1 as granted, thus complying with

Article 123(2) and (3) EPC.

3.1 *Admission into the appeal proceedings*

Although those auxiliary requests were also filed for the first time with the respondent's letter of reply to the summons to oral proceedings before the board, they were likewise admitted into the appeal proceedings under Article 13(1) and (3) RPBA, since the board holds that added feature 1.16), taken from claim 6 as granted, did not render the assessment of inventive step more complex, so that the appellant could reasonably be expected to deal with those claim requests without adjournment of the oral proceedings.

3.2 Article 52(1) EPC: novelty and inventive step

3.2.1 The feature analysis and the observations set out in points 1.1 and 1.2 above regarding claim 1 of the main request apply *mutatis mutandis* to claim 1 of the present auxiliary requests.

3.2.2 Added feature 1.16) is understood as providing a visual feedback indication in the event that the user of the blood treatment machine follows at least one of the operating instructions presented. The board accepts that this kind of visual feedback, unlike the operating instructions and pictographs according to features 1.12) and 1.13), indeed conveys information about the operating state of the machine and thus represents "technical information" in the sense of the observations in point 1.2.4 above. However, the board also notes that the wording of feature 1.16) is silent on whether or not the performance of said operating instruction(s) must have been successful in order to trigger that visual indication. On the other hand, D2

also teaches that, when initiating a machine control procedure, the label of a tab (i.e. "MAIN") may change "in corresponding relation to predetermined, pre-bypass steps to be completed" (see D2, page 85, lines 7-11) or, as submitted by the appellant, that a series of messages are automatically displayed indicating the completion of certain configuration steps (see D2, page 90, lines 5-12). Also, D2 discloses that the tabs are illuminated upon selection (see D2, page 85, lines 13-15) or that touch-screen buttons are highlighted upon completion of certain machine set-up steps (see D2, page 93, lines 23-26).

Therefore, and in the absence of any further details about the type of display modification and the actual operation performed on the blood treatment machine in present claim 1, the visual indication of any arbitrary operating step executed by the user must be considered to be a known and obvious implementation measure to the skilled person in the field of user interface design. This is all the more so when the execution of an operating step depends on non-technical information as in the present case (cf. point 1.2.5 above).

3.2.3 For the above reasons, the subject-matter of claim 1 of both auxiliary requests does not involve an inventive step over D2.

3.3 In conclusion, auxiliary requests II and III are not allowable under Article 56 EPC either.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chair:

K. Götz-Wein A. Ritzka

Decision electronically authenticated