Datasheet for the decision of 23 June 2010

Case Number: T 1032/06 - 3.2.02
Application Number: 97927581.5
Publication Number: 0959913
IPC: A61M 1/14
Language of the proceedings: EN
Title of invention: Dialysis machine with control panel
Patentee: ALTHIN MEDICAL AB
Opponent: Fresenius Medical Care Deutschland GmbH
Headword: -
Relevant legal provisions:
EPC Art. 56
Relevant legal provisions (EPC 1973):
EPC Art. 83
Keyword: "Insufficiency of disclosure (no)"
"Inventive step (yes)"
Decisions cited: -
Catchword: -
Case Number: T 1032/06 - 3.2.02

DECISION
of the Technical Board of Appeal 3.2.02
of 23 June 2010

Appellant: ALTHIN MEDICAL AB
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Composition of the Board:
Chairman: M. Noël
Members: P. L. P. Weber
A. Pignatelli
Summary of Facts and Submissions

I. By decision of 3 May 2006, the Opposition Division ruled that, account being taken of the amendments as per the auxiliary request, the patent and the invention to which it related met the requirements of the EPC.

The proprietor's notice of appeal was filed on 3 July 2006, and the statement setting out the grounds of appeal followed on 11 September 2006.

II. The following documents play a role in the present appeal decision:

D1: WO-A-95/34780
D7: GB-A-2230946

III. Oral proceedings were held on 23 June 2010, at the end of which the requests of the parties were as follows:

The appellant (patentee) requested that the decision under appeal be set aside and that the patent be maintained as granted, or as per the first auxiliary request filed as former third auxiliary request on 11 June 2010, or as per the second auxiliary request filed on 19 May 2010, or as per the third auxiliary request filed as first auxiliary request with the grounds of appeal.

The respondent (opponent) requested that the appeal be dismissed.

IV. Claim 1 as granted reads as follows:
"A dialysis machine for hospital care and self care applications, said machine comprising a chassis (11) and a touch screen (16) mounted on the chassis, characterised in that the touch screen is mounted on an arm (19) through a first coupling (22, 23) and the arm is attached to the chassis through a second coupling (17) that allows the arm to be rotated and moved vertically relative to the chassis so as to provide for movement of the touch screen about the chassis and vertical adjustment of the touch screen relative to the chassis and wherein means are provided to lock the touch screen in a desired position relative to an operator which allows the touch screen to be comfortably reached irrespective of the position of said operator."

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

Concerning the sufficiency of disclosure, claim 1 as granted had to be viewed in the context of the patent specification as a whole and read with a willingness to understand. A complete embodiment of the invention was described starting on page 3 of the description, and it was clear to any reader that the touch screen was not meant to be reachable by several operators at a time situated in different positions, but to be displaceable so as to be reached comfortably by one operator, be it standing, sitting or lying. Thus the invention was sufficiently disclosed to be carried out by a person skilled in the art.
While conducting haemodialysis in a home environment (not just in a hospital environment) was well known, the dialysis machines for home use were usually relatively simple. With the development of computer technology allowing for the profiling of certain treatment parameters with, for instance, the help of such an easy data-entry interface as a touch screen, the inventor's idea was to make a machine accessible for self-care applications as well as for hospital applications using said new interface.

Starting from document D2 which used a touch-screen user interface, the objective problem was to make the dialysis machine usable for self-care as well as for hospital care with the patient sitting, standing or lying.

However D2 lacked the necessary teaching to motivate the person skilled in the art to modify the dialysis machine described therein by placing the touch screen on an articulated arm as presently claimed. D2 was concerned with hospital care and did not cover the possibility of using the disclosed machine for home care, and even less to mount the touch screen in the way claimed. Even if the person skilled in the art had contemplated changing the mounting of the screen, there was no apparent reason to turn to D1. Indeed solutions other than the claimed one would be possible, for instance the machine according to D2 could be equipped with two screens or with a remote touch-screen. It was not immediately evident to use an arm.

Even if the person skilled in the art considered the teaching of D1, he would not have arrived at the
claimed invention. D1 disclosed nothing other than a desk-top mounted support arm for positioning a working surface relative to that desk top. Such a support arm could not provide the necessary range of movement to allow a touch screen for a dialysis machine to be operable by a standing healthcare worker as well as by a sitting or resting patient; in particular it did not allow sufficient downward movement. In fact it was only conceived to be mounted on a desk and there to be movement of the support in front of the desk, and there was no desk on a dialysis machine. In addition several embodiments shown in D1 had arms made of several segments whereas a proper interpretation of the claimed subject matter required an arm in the form of a single segment.

Additionally D1 ignored the potential problem of snagging the hose connections typically associated with dialysis machines.

The same reasoning applied for document D7.

Therefore, the subject-matter of claim 1 was not obvious to the person skilled in the art.

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

The feature of claim 1 according to which the touch screen should be comfortably reachable irrespective of the position of the operator was not sufficiently disclosed to be carried out. As a matter of fact there was no teaching whatsoever in the patent specification as to how the positioning should be done so as to allow
a standing nurse, a sitting patient as well as a resting patient to reach the touch screen comfortably at the same time.

The same objection applied to the feature whereby the locking means should lock the touch screen so that it could be comfortably reached irrespective of the position of the operator. No lock means were described which would allow such functionality.

Neither was the term "irrespective of the position of the operator" described sufficiently to be carried out. This feature suggested that wherever the operator was, the touch screen should be comfortably reached.

The invention was thus not sufficiently disclosed to allow the person skilled in the art to carry it out.

The subject-matter of claim 1 lacked inventive step vis-à-vis a combination of D2 and D1 or D2 and D7.

Starting from D2, the objective problem was to be able to have a variable positioning of the touch screen.

This typically was an ergonomic problem, so the person skilled in the art would not be limited to the medical field of the dialysis machines. He would find it natural to look for a solution in office appliances and would adopt the D1 or D7 solution and arrive at the claimed subject-matter. In D1 there was a specific teaching that the working platform should be reachable by a sitting or standing user and the working platform could be moved vertically or rotated. On page 15 of D1 there was even a teaching that the working surface
could be positioned anywhere. The freedom of vertical and horizontal movement could be seen in figure 2 as well as in figure 16 of D1. It was also clear from the description that the fixing of the arm could be elsewhere, it did not have to be on a desk. The same was true for the arm according to D7. The person skilled in the art would think without difficulty of mounting any such arms to the dialysis machine.

Concerning the arm as claimed, there was no requirement whatsoever that it should be conceived as a single segment, and there was no requirement whatsoever that the arm as a whole should be moved vertically in the sense of a translation. When the arm was rotated about a horizontal axis as in D1 or D7 each point of the arm was moved vertically as well.

Thus, the subject matter of claim 1 was not inventive.

Reasons for the Decision

1. The appeal is admissible

2. Insufficiency of disclosure

In the opinion of the Board the last feature of claim 1 must be interpreted in the light of the patent as a whole. The aim of the invention is to be able to position the touch screen so that it can easily be used by a sitting or lying patient undergoing dialysis treatment, by a nurse or by a technician using or working on the dialysis machine. In other words the screen must be positionable in a way which allows the
user to use it comfortably irrespective of whether he is standing, sitting or lying close to the dialysis machine. It is not the aim of the invention to position the screen so that it may be used by a number of users at the same time whatever their respective positions in relation to the dialysis machine.

The description of the patent discloses an embodiment which allows such positioning of the screen 16. It teaches the use for instance of a guide cylinder 13, a bracket 17, an arm 19 and joint 23 for positioning the screen close to the specific user, see [0009]: "A bracket 17 is mounted for displacement on the guide 13. It can be displaced up and down on the guide...", and [0010]: "The arm 19 carries at the outer free end thereof a holder 22 which at a joint 23 is connected with arm 19 for rotation about a vertical axis... Holder 22 can also be rotated about a horizontal axis... Preferably the joint 23 comprises a universal joint (ball joint) which allows adjustment of holder 22 and thus touch screen 16 about axis 24 as well as axis 26."

The person skilled in the art is thus able to carry out the invention on the basis of the information available in the description and his general knowledge, thereby satisfying the requirements of Article 83 EPC.

3. Inventive step

3.1 Both parties consider that D2 discloses the closest prior art. The Board sees no reason to depart from that view. D2 corresponds to the state of the art mentioned at the beginning of the description of the patent (see [0002]) and used to delimit granted claim 1.
In respect of this document it must be noted that although most dialysis machines can theoretically be placed at home for self-care, there is no specific suggestion in D2 that the machine described therein should be specifically adapted for such home use or self-care.

3.2 When compared with D2, the machine according to the invention is not only for hospital-care applications but also for self-care applications and additionally comprises all the features of the characterising portion of claim 1, namely that the touch screen is mounted on an arm through a first coupling and the arm is attached to the chassis through a second coupling that allows the arm to be rotated and moved vertically relative to the chassis so as to provide for movement of the touch screen about the chassis and vertical adjustment of the touch screen relative to the chassis and wherein means are provided to lock the touch screen in a desired position relative to an operator which allows the touch screen to be comfortably reached irrespective of the position of said operator.

3.3 The higher mobility of the screen given by the characterising features of claim 1 allows for positioning the screen more comfortably and ergonomically for a user situated in any position around the dialysis machine, especially for a sitting or lying patient when the machine is used in self-care applications, but also for a standing nurse when the dialysis machine is used in hospital-care applications, or for a technician working on the machine whatever its position.
3.4 When starting from D2, the objective problem can thus be seen as an adaptation of the known dialysis machine for self-care applications and more generally as an improvement of user ergonomics.

The respondent considered that starting from D2 the objective problem would be to improve the positioning possibilities of the screen so as to make it usable by a standing, sitting or lying user. The Board does not agree with this more specific objective problem as it already contains an element of the solution by assuming a movable screen. This is, however, not necessarily the only solution for improving ergonomics or adapting the machine for self-care.

3.5 The Board is convinced that the solution proposed in claim 1 is inventive for the following reasons.

Both D1 and D7 used by the respondent in combination with D2 relate to office appliances and more particularly to support arms connected to a platform for CRT monitors (D7) or for keyboard, display monitor, pointing device, wrist support or the like (D1).

3.5.1 There is no mention in any of these two documents that the support arms and platforms disclosed therein are adapted for use in a medical environment. It is well known that equipment in a medical environment generally has to be easy to clean so that bacteria, fungus or other microbes do not easily remain and develop in parts of the device.

For this reason alone, the Board doubts that the person skilled in the art would think of the general field of
office appliances in the search for a solution to a problem with a machine for medical use.

3.5.2 The support arms disclosed in D1 or D7 are intended to be fixed to a working surface such as a desk (D7: page 1, line 10) or to a base structure such as the underside of a desk top, a stationary pedestal or a movable unit (D1: page 7, lines 33 to 36). In D2 there is no indication whatsoever that a surface of any kind is available on the dialysis machine which would allow the fixation of an arm such as that disclosed in D1 or D7.

3.5.3 Furthermore neither D1 nor D7 mentions an application implying a touch screen and both documents disclose systems comprising a support platform (D7: 104; D1: 50) so that the person skilled in the art would have to adapt the platforms for supporting a pivotably mounted normally flat touch-screen.

3.5.4 The Board considers that a proper interpretation of the first part of the characterising feature of claim 1 "the touch screen is mounted on an arm (19) through a first coupling (22, 23) and the arm is attached to the chassis through a second coupling (17) that allows the arm to be rotated and moved vertically relative to the chassis so as to provide for movement of the touch screen about the chassis and vertical adjustment of the touch screen relative to the chassis" implies that:
   - there is one arm with two couplings:
     - a first coupling for attaching the screen to the arm
     - a second coupling:
which attaches the arm to the chassis
which allows the arm to be rotated and
moved vertically relative to the chassis.

In the opinion of the Board the arm attached to the
desk in D7 or D1 cannot be moved vertically within the
meaning of the claimed invention. In D7 and D1 the arms
are only rotatably connected and the rotational
movement of the arm allows for a vertical displacement
of the platform, but there is no vertical movement of
the arm relative to the chassis.

Notwithstanding the opinion of the respondent, the
Board considers that there is no room for interpreting
the claimed feature as meaning that the vertical
movement and the rotational movement of the arm would
be parts of a single movement. The wording of claim 1
does not require that the arm should be rotatable in a
vertical plane but specifically requires that the
second coupling 17 allows the arm to be rotated and
moved vertically relative to the chassis. This ability
of the arm is in line with the range of rotation and
vertical movement needed for instance for easy access
by a standing nurse or a lying patient.

3.5.5 Finally the Board is convinced that the arms disclosed
in D1 or D7 do not allow the range of movement needed
for positioning a touch-screen for easy access by a
lying or a standing person. This range of movement is
not needed in office appliances which are meant for a
user sitting at a desk or, at most, standing at such a
desk.
3.6 In other words the Board considers that even if the person skilled in the art had looked at D1 or D7 to find a solution to the problem of improving the ergonomics for the user of the machine according to D2 and have tried to adopt one of the solutions proposed in these documents, he would not have arrived at the claimed subject-matter. To do so he would still have to change the way the arms are connected to the device, since a dialysis machine is not generally supplied with a desk top; he would have to adapt the platforms to enable them to hold a flat touch-screen; he would have to change the way the platform is moved vertically as none of the arms disclosed in D1 or D7 is movable vertically relative to the chassis; and he would have to change the range of movement allowed by the arms to facilitate access for a lying and for a standing user.

3.7 For the above reasons the Board considers the subject-matter of claim 1 to be inventive, thereby satisfying the requirements of Article 56 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is maintained as granted.

The Registrar: The Chairman:

D. Sauter M. Noël