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**Datasheet for the decision
of 20 October 2010**

Case Number: T 0288/07 - 3.5.05

Application Number: 03017795.0

Publication Number: 1394717

IPC: G06F 19/00

Language of the proceedings: EN

Title of invention:

Touchscreen controlling medical equipment from multiple manufacturers

Applicant:

Storz Endoskop Produktions GmbH

Headword:

Touchscreen for remote control of surgical devices/STORZ
ENDOSKOP

Relevant legal provisions (EPC 1973):

EPC Art. 56

Keyword:

"Inventive step - yes (after amendments)"

Catchword:

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Case Number: T 0288/07 - 3.5.05

D E C I S I O N
of the Technical Board of Appeal 3.5.05
of 20 October 2010

Appellant: Storz Endoskop Produktions GmbH
Mittelstrasse 8
D-78532 Tuttlingen (DE)

Representative: Heuckeroth, Volker
Witte, Weller & Partner
Patentanwälte
Postfach 10 54 62
D-70047 Stuttgart (DE)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 22 September 2006
refusing European patent application
No. 03017795.0 pursuant to Article 97(1) EPC
1973.

Composition of the Board:

Chairman: A. Ritzka
Members: P. Cretaine
P. Schmitz

Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division to refuse European patent application No. 03017795.0, published as EP 1 394 717 A. The decision was announced in oral proceedings held on 31 January 2006 and written reasons were dispatched on 22 September 2006.
- II. The application was refused because of lack of inventive step (Article 52(1) EPC and Article 56 EPC 1973) of the claims of a main request and an auxiliary request, having regard to the disclosure of prior-art document

D3: WO 00/72180.
- III. The notice of appeal was submitted on 30 November 2006 and the appeal fee was paid on the same day. In the statement setting out the grounds of appeal, submitted on 2 February 2007, it was requested that the appealed decision be set aside and that a patent be granted on the basis of one of the two sets of claims 1 to 21 filed as main and auxiliary requests with the statement setting out the grounds of appeal. Oral proceedings were requested on an auxiliary basis.
- IV. A summons to oral proceedings on 20 October 2010 was issued on 26 July 2010. In an annex accompanying the summons the board expressed the preliminary opinion that the subject-matter of independent claim 1 of the main request was not new (Article 54 EPC) having regard to the disclosure of D3 and did not involve an

inventive step (Article 56 EPC 1973) having regard to the disclosure of

D1: US 5 788 688.

The subject-matter of independent claim 19 of the main request did not involve an inventive step (Article 56 EPC 1973) having regard to the disclosure of D3 or alternatively D1. The subject-matter of independent claims 1 and 19 of the auxiliary request did not involve an inventive step (Article 56 EPC 1973) having regard to the disclosure of D3.

V. With a letter received by telefax on 20 September 2010, the appellant filed a set of claims 1 to 14 as a second auxiliary request and a set of claims 1 to 13 as a third auxiliary request. The appellant submitted arguments in support of these requests.

VI. Oral proceedings were held on 20 October 2010. In the course of them the appellant presented claim 1 of an auxiliary request which was later withdrawn, and filed claims 1 to 14 of a main request which became the sole request, all other requests having been withdrawn.

VII. Independent claim 1 according to the main request reads as follows:

"1. A medical communication and control system comprising:
a touchscreen (24, 54) capable of receiving inputs;
a controller (25, 55) for the touchscreen;
a controller command protocol for the touchscreen controller (25, 55);

a first and a second remotely controllable surgical device;

a first and a second command protocol for control of the first and a second surgical device respectively;

and

an interface (23), connected between the touchscreen controller (25, 55) and the remotely controllable surgical devices for converting the controller command protocol to the first and second command protocols for transforming inputs received by the touchscreen (24, 54) into commands for controlling the first and second remotely controllable devices,

characterized in that the touchscreen displays an exact replica of a control interface (15, 17, 19, 21, 36, 56, 58) particular to at least one of the remotely controllable surgical devices and thereby displaying a status of the at least one remotely controllable surgical device,

the system further comprising a database (45) accessible by the controller for storing the replica control interfaces (26, 28, 56A, 58A) of various surgical devices, and

an image, stored on said database (45), replicating the control interface (15, 17, 19, 21, 36, 56, 58) particular to said remotely controllable surgical device,

wherein said controller upon connection of said remotely controllable surgical device queries said database (45) for said image replicating the control interface (15, 17, 19, 21, 36, 38, 58) particular to said remotely controllable surgical device for display on the touchscreen (24, 54) to receive inputs and to display a status of the remotely controllable surgical device, and wherein if said controller does not locate

said image on said database, said controller automatically downloads over a network connection and stores said image on said database (45) for use with said touchscreen (24, 54)."

VIII. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the set of claims 1 to 14 filed at the oral proceedings as sole and main request.

Reasons for the Decision

1. Admissibility

The appeal complies with the provisions of Articles 106 to 108 EPC 1973 (see point III above). It is therefore the appeal is admissible.

2. Amendments

Independent claim 1 is based on originally filed claims 1 to 3, 10, 15 and 16. Dependent claims 2 to 14 are based on originally filed claims 5 to 9, 11 to 14 and 16 to 19. The claims therefore fulfil the requirements of Article 123(2) EPC.

3. Novelty and inventive step

3.1 Prior art

D1 discloses a surgeon's command and control system which centres around a personal computer communicating on one side with surgical devices and on the other side

with a sterile control panel (see figure 4) located at the surgeon's operating station. Each surgical device includes a control head comprising a visual display panel for displaying output parameters of the surgical instruments as well as monitored inputs, and a series of buttons and switches for varying the output which drives the surgical instruments (see column 7, lines 1 to 6). The sterile control panel provides duplicate control heads for each device integrated into the system so that any command input possible through adjustments made on the device's equipment box control head can be made at the sterile control panel (see in particular column 4, lines 45 to 51). The control panel comprises a membrane switch and display panel having a layout designed with human factors of the surgeon in mind (see column 9, lines 8 to 51). However, in the view of the board, D1 does not unambiguously disclose that the control panel displays an image exactly replicating the control head of at least one surgical device, as may also be seen from the comparison between the control panel displayed in figure 4 and the surgical devices mounted in rack 42 in figure 1.

D3 discloses a networking infrastructure for an operating room, wherein surgical devices are connected to a single network and may be controlled by the surgeon through a web-like interface or browser displayed on a touch panel (see figure 5, reference 826). Each surgical device includes a ROM storing control forms specific to the device and written in the html language. The control forms may be chosen by the user (e.g. surgeon or nurse) according to his needs for display on a touch-sensitive flat panel of the device, thereby enabling local control of the

device by the user (see page 9, lines 5 to 11). Upon connecting a surgical device to the network, its control forms in ROM are sent to all other devices in the network to establish remote control of the surgical device (see page 9, lines 26 to 32). In particular the same control form may be shown locally for that device's local display and on another connected surgical device (see page 10, lines 5 to 7).

In the board's view, D3 represents the closest prior art since it contemplates the use of the same displayed control form for local and remote control of a surgical device. The touchscreen of claim 1 can be read onto the touch-sensitive flat panel display of a surgical device, the controller of claim 1 can be read onto the embedded controller of that surgical device and the protocols and interface defined in claim 1 can be read onto the networking environment used in D3 (see page 7, lines 6 to 15).

3.2 The differences between the subject-matter of claim 1 and the disclosure of D3 are thus substantially the following:

(a) the touchscreen displays an exact replica of a control interface of the remotely controllable surgical device;

(b) the system comprises a database for storing replica control interfaces of various surgical devices, and the controller, upon connection of the remotely controllable surgical device, queries the database for the replica control interface corresponding to the device and, if it is not located, automatically

downloads over a network connection and stores the corresponding replica control interface on the database.

In the board's view it is questionable whether feature (a) can be considered as a technical feature. However, even if it was considered to be a technical feature, feature (a) taken alone would not contribute to inventive step since it is derivable from the teaching of D3 in respect of the same html form being shown at a device for local control and also at another connected device for remote control. The board also considers that the skilled person is aware of remote control devices and simulation devices replicating the front panel displays of the devices they control and simulate; applying this common general knowledge to the touchscreen display of claim 1 therefore lies within the general design competence of the skilled person.

The technical effects achieved by feature (b) are that the images replicating control interfaces of surgical devices are stored in the system in a database which may be automatically updated (e.g. from the internet), instead of being stored in read-only memories of the devices as in D3.

The objective technical problem can thus be formulated as how to enable the system to adapt to new devices or to existing devices having a new control interface.

In the system of D3, a plurality of control forms in html format are stored in each device's ROM so that the user can choose one according to his needs. Any new device added to the system of D3 must therefore include such a ROM. To adapt the system of D3 to new or

modified devices, the skilled person would thus naturally consider having the ROMs changed in existing devices or adding new devices with their own control forms stored in ROMs. The solution provided by the features of claim 1, using an updatable database accessed by the controller, has the advantage of enabling a rapid updating of the control interfaces used by the system without the need for the manufacturers of surgical devices to program and incorporate ROMs at the surgical devices. The skilled person will also not find any hint in D1 to proceed in that way, since the control panel in D1 is tailored to existing surgical devices and not alterable.

For these reasons the board judges that the subject-matter of claim 1 involves an inventive step (Article 56 EPC), having regard to the prior-art documents on file.

Claims 2 to 14 are dependent claims, directed to further embodiments of the subject-matter of claim 1 and, as such, also meet the requirements of Article 56 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the examining division with the order to grant a patent on the basis of claims 1 to 14 as filed during the oral proceedings before the board and a description and drawings still to be adapted.

The Registrar

The Chair

C. Rodríguez Rodríguez

A. Ritzka