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**Datasheet for the decision  
of 27 April 2015**

**Case Number:** T 1905/11 - 3.2.02  
**Application Number:** 07110702.3  
**Publication Number:** 1872736  
**IPC:** A61B19/00, A61F9/007, G06F19/00  
**Language of the proceedings:** EN

**Title of invention:**

System and method for the modification of surgical procedures  
using a graphical drag and drop interface

**Applicant:**

Novartis AG

**Headword:**

**Relevant legal provisions:**

EPC Art. 56  
RPBA Art. 13(1)

**Keyword:**

Inventive step - (no)  
Late-filed auxiliary request - admitted (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern  
Boards of Appeal  
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Case Number: T 1905/11 - 3.2.02

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.02**  
**of 27 April 2015**

**Appellant:** Novartis AG  
(Applicant) Lichtstrasse 35  
4056 Basel (CH)

**Representative:** Hanna, Peter William Derek  
Hanna Moore & Curley  
13 Lower Lad Lane  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 29 April 2011  
refusing European patent application No.  
07110702.3 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** E. Dufrasne  
**Members:** C. Körber  
D. Ceccarelli

## **Summary of Facts and Submissions**

- I. On 29 April 2011 the Examining Division posted its decision to refuse European patent application No. 07110702.3 for lack of inventive step.
- II. An appeal was lodged against this decision by the applicant by notice received on 13 June 2011, with the appeal fee being paid on the same day. The statement setting out the grounds of appeal was received on 26 August 2011.
- III. By communication of 9 February 2015, the Board summoned the appellant to oral proceedings and forwarded its provisional opinion.
- IV. Oral proceedings were held on 27 April 2015. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 5 of the request filed with letter dated 26 August 2011 or, in the alternative, on the basis of claims 1 to 5 of the auxiliary request filed during the oral proceedings.
- V. The following documents are of importance for the present decision:

D1: WO-A1-2006/060423

D2: US-B1-6 251 113

D5: US-A1-2002/0193676.

VI. Claim 1 of the main request reads:

"A graphical user interface (132) for the control of a surgical procedure to be performed under the control of a surgical console (100), comprising:  
a touch screen display (115) coupled to the surgical console;  
a first display (135), of the touch screen display (115), representing the surgical procedure as part of a procedural paradigm comprising an arrangement of the representations of one or more current surgical steps under the control of the surgical console, wherein each surgical step comprises predefined steps stored in a memory (204) of the surgical console, characterized in that a second display (140), of the touch screen display (115), comprises representations of available individual surgical steps (142) that may be selected by the user for arrangement in the first display, to create a representation of a modified surgical procedure,  
means (200) for allowing the user to create the representation of the modified surgical procedure using the touch screen (115) comprising;  
drag and drop means (206) for adding or removing, or modifying (260) the order of the representations of the one or more surgical steps (142) to be performed in the modified surgical procedure,  
and means (214) for detecting that the representation of the surgical procedure in the first display (135) has been modified, to modify the procedural flow (265) of the procedural paradigm under the control of the surgical console (100) to be performed, and its associated operational parameters stored in the memory (204) of the surgical console, to correspond to the

modified procedure as shown on the first display (135) of the touch screen display (115)."

Claim 2 relates to a computer implemented method for providing a graphical interface corresponding to that defined in claim 1 in terms of method features, claims 3 and 4 relate to computer programs and claim 5 relates to a surgical system comprising a controller configured to perform the steps of claim 2.

Claim 1 of the auxiliary request corresponds to that of the main request with the second paragraph of the characterising portion reading as follows (amendment shown in bold):

"means (200) for allowing the user to create the representation of the modified surgical procedure **on the fly to cope with arising complications during surgery**, using the touch screen (115) comprising;"

The same amendment has been inserted in claim 2 of the auxiliary request.

VII. The appellant's arguments are summarised as follows:

In document D2 the user was not enabled to alter the pre-defined sequence by selecting and inserting a new mode into the sequence, completely re-arranging the sequential order of the displayed modes or deleting a mode from the displayed sequence. D2 did not teach dragging and dropping representations of surgical steps, by adding, removing or changing the order of steps, because the sequence of the displayed modes was predefined and could not be changed by the user. The user was only enabled to proceed forwards or backwards through modes in a set predefined or static sequence.

All this enabled the user to do was to skip or repeat a mode. There was no way to alter the sequence of the steps or modes, or to remove steps in a sequence, so as to create a new overall "operating mode" or "procedural paradigm" under the current or active control of the surgical console. That had not been envisaged or taught by D2. The technical effect of the claimed invention was to permit the user to modify, add or eliminate pre-programmed surgical steps "on the fly" with speed due to the convenience of the "drag and drop" graphical user interface. The user could quickly and reliably modify a surgical procedure under the current control of the surgical console to handle unexpected complications. This was a technical contribution to the art which would not have been obvious. The implementation of a "drag and drop" graphical user interface was of course well known per se, apart from D5, and would have been known at the time that D1 was filed. However, this was only one feature of the combination of technical features claimed. The invention had to be considered as a whole. The fact remained that "on the fly" manipulation and modification of the entire sequence of pre-programmed surgical steps in a surgical console as claimed was both novel and inventive at that time. Column 20, lines 41 to 63, column 21, lines 22 to 52, column 22, lines 1 to 27 and column 23, lines 21 to 56 of D2 related to the setup procedure where the console was adjusted to the individual surgeon's preferences beforehand by creating a translated setup file which was adapted to the available hardware. In contrast, the user interface of claim 1 allowed the surgical procedure to be changed during the actual operation where the surgeon had to be able to react quickly.

The auxiliary request was filed in an attempt to more clearly distinguish the claimed subject-matter from the disclosure of D2. The amendments were supported by various passages of the application as originally filed and made it clear that the sequence could be changed "on the fly" during surgery.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Main request - inventive step

Document D2 as closest prior art discloses (in the wording of claim 1) a graphical user interface (5) for the control of a surgical procedure to be performed under the control of a surgical console (1), comprising:  
a touch screen display (255) coupled to the surgical console;  
a first display (column 18, lines 50 to 55), of the touch screen display, representing the surgical procedure as part of a procedural paradigm (column 20, lines 49 to 51; column 21, lines 3 to 4 and 38 to 43; left column of Table 1) comprising an arrangement of the representations of one or more current surgical steps ("modes": column 3, lines 43 to 45; column 19, line 66, to column 20, line 1; column 20, lines 26 to 34) under the control of the surgical console, wherein each surgical step comprises predefined steps ("functions": column 20, lines 1 to 3 and 8 to 13) stored in a memory (column 20, lines 23 to 26) of the surgical console,  
wherein a second display (column 18, lines 55 to 65; Figures 27 to 30), of the touch screen display (255),

comprises representations of available individual surgical steps that may be selected by the user for arrangement in the first display, to create a representation of a modified surgical procedure (column 30, lines 12 to 17), means (417, 419, 421) for allowing the user to create the representation of the modified surgical procedure using the touch screen (255) comprising; means for removing (column 22, lines 22 to 24; column 23, lines 33 to 36), or modifying the order (column 21, lines 25 to 32; column 22, lines 22 to 28) of the representations of the one or more surgical steps to be performed in the modified surgical procedure, and means (column 23, lines 51 to 56) for detecting that the representation of the surgical procedure in the first display has been modified, to modify the procedural flow of the procedural paradigm under the control of the surgical console (1) to be performed, and its associated operational parameters stored in the memory (249) of the surgical console, to correspond to the modified procedure as shown on the first display of the touch screen display.

Accordingly, D2 does in fact disclose that representations of surgical steps can be modified by removing steps or changing their order, in contrast to the appellant's view.

The appellant argued that the features in the last three paragraphs of claim 1 identified in D2 as indicated above related to the setup procedure where the console was adjusted to the individual surgeon's preferences beforehand, whereas the user interface of claim 1 allowed the surgical procedure to be changed during the actual operation where the surgeon must be able to



react quickly. From Figure 26 of D2 and the corresponding text in column 23 it became clear that a translated setup file was created which was adapted to the available hardware. In claim 1 this difference was reflected by the means for detecting as defined in the last paragraph of the claim.

In the Board's view, however, there is nothing in the wording of claim 1, and especially not its last paragraph, that would exclude an adaptation during a setup procedure as disclosed in D2. The graphical user interface as claimed can also be used in such a situation.

Accordingly, the subject-matter of claim 1 is distinguished over D2 in that the means defined in the penultimate paragraph of the claim are **drag and drop** means and that the means provide the further alternative of **adding** one or more surgical steps to be performed in the modified surgical procedure (in addition to removing one or more steps or modifying their order as disclosed in D2).

Since D2 already discloses that steps can be deleted and their sequence altered, the provision of the additional possibility of adding one or more steps is straightforward and self-evident for the skilled person. As acknowledged by the appellant itself, the implementation of a "drag and drop" means was within the common technical knowledge of the skilled person ("of course well known per se, apart from D5, and would have been known at the time that D1 was filed"). Examples of respective evidence may be found in D1 (page 15, 1<sup>st</sup> paragraph) and D5 (paragraphs 12 and 39).

Accordingly, the subject-matter of claim 1 is obvious from D2 and common general knowledge and thus not based on an inventive step (Article 56 EPC).

3. Auxiliary request - admissibility

The appellant stated that it filed this request during the oral proceedings in an attempt to distinguish the claimed subject-matter more clearly from the disclosure of D2. It is noted, however, that this document was already cited as closest prior art in the impugned decision as well as in the communication of the Board issued with the summons to oral proceedings.

Accordingly, there was ample opportunity and time for filing such a request much earlier, rather than waiting until an extremely late point in the appeal procedure, viz. the oral proceedings.

Moreover, the request is not prima facie clearly allowable for the following reasons. Claims 1 and 2 were amended by adding the feature "on the fly to cope with arising complications during surgery". The appellant cited page 2, line 20, page 11, lines 13 to 14 and page 12, line 1 in support of this amendment. The term "on the fly", however, is only disclosed at line 20 of page 2 of the description as originally filed, which forms part of the section "Background", rather than the following sections dealing with the claimed invention itself. Moreover, the amendment does not provide a clear technical teaching that is suitable for distinguishing the claimed subject-matter over the disclosure of D2. The term "on the fly" could also relate to the activity of creating the setup file described in the penultimate paragraph of column 23 of D2. The indication of an intended purpose, viz. "to cope with arising complications during surgery", is

per se not well suited to define a technically clear distinction in a claim directed to a product such as present claim 1 (which relates to a graphical user interface). Moreover, it would have to be established whether or not this purpose could also be underlying the invention described in D2. Finally, this amendment is entirely based on the description and does not form part of the original set of claims. Accordingly, it is doubtful whether this feature was covered by the search.

Since the auxiliary request is not prima facie clearly allowable and since there are no sound reasons for filing it so late, the Board exercises its discretion under Article 13(1) RPBA and does not admit this request.

## **Order**

### **For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:



D. Hampe

E. Dufrasne

Decision electronically authenticated