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**Datasheet for the decision  
of 12 June 2007**

**Case Number:** T 0107/05 - 3.5.03

**Application Number:** 97201648.9

**Publication Number:** 0813131

**IPC:** G05B 19/409

**Language of the proceedings:** EN

**Title of invention:**

Graphical user interface for programming a motor controller

**Patentee:**

Danfoss Drives A/S

**Opponent:**

Siemens AG  
SEW Eurodrive GmbH & Co.

**Headword:**

Graphical user interface/DANFOSS

**Relevant legal provisions:**

EPC Art. 56  
RPBA Art. 9(1), 10b(1), 11(6)  
EPC R. 67

**Keyword:**

"Inventive step - no"  
"Late filed request - not admitted"  
"Request for reimbursement of appeal fees - refused"

**Decisions cited:**

T 0231/95, T 0208/00, T 0177/98, T 0135/96

**Catchword:**

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Case Number: T 0107/05 - 3.5.03

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.03  
of 12 June 2007

**Appellant I:** Siemens AG  
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**Appellant II:** SEW Eurodrive GmbH & Co.  
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**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
24 November 2004 concerning maintenance of  
European patent No. 0813131 in amended form.

**Composition of the Board:**

**Chairman:** A. S. Clelland  
**Members:** A. J. Madenach  
M.-B. Tardo-Dino

## Summary of Facts and Submissions

I. The present appeals arise from the interlocutory decision of the opposition division posted on 24 November 2004 according to which the patent in amended form complied with the requirements of the EPC.

Claim 1, the sole independent claim of the patent as maintained by the interlocutory decision of the opposition division, reads as follows:

"A method of programming a user interface for initially setting up a motor controller (4) via a computer (1) with a monitor (2) displaying different screen displays (Fig. 2), wherein the controller is a frequency converter configured by way of parameters and the operator is guided sequentially through the programming procedure, the method comprising the steps of:

- a) displaying a first view (Fig. 3, Fig. 4) with a graphic representation of modes of application of the motor controller, where each mode contains a number of parameters (33-47) for configuring the motor controller, these modes of application indicating the basic control principles to be chosen,
- b) selecting one of these modes of application,
- c) in the sequentially guided views limiting the number of settings and choices to be done by the operator to only contain parameters from the selected mode of application,

d) whereby each view consists of a set of family parameters (42, 43, 44, 45, 46, 47), i.e. functionally related parameters, and

e) incorporating into each view graphics (32, 38, 39) relating to the set of family parameters."

II. The opposition division considered

E1: US 5 465 215 A

to represent the closest prior art. In essence, they concluded that E1 was neither concerned with an "initial setting up" as claimed nor with the programming of a frequency converter, and that the person skilled in the art of frequency conversion would not have been led by the teaching of E1 to arrive at the subject-matter of claim 1. The same conclusion on inventive step was reached in respect of various other documents cited in the course of the opposition procedure.

Arguments based on a known frequency converter, Danfoss VLT series 3000, described in the patent as closest prior art, were said to be unconvincing as the description of this device in the patent did not permit a feature analysis and no relevant documents were cited.

III. A first notice of appeal was filed in the name of opponent I, Siemens, by letter received 20 January 2005. The grounds of appeal were filed with letter received 17 March 2005. Revocation of the patent was requested. An auxiliary request was made for oral proceedings.

Appellant I argued that the subject-matter of claim 1 lacked an inventive step, Article 56 EPC, in view of the disclosure of E1 or that of

E2: WO 96/11433 A.

Reference was also made to a common frequency converter, of which the Danfoss frequency converter VLT series 3000 as described in the patent was said to be an example.

It was in particular argued that the claimed subject-matter did not relate to initially setting up a motor controller, as concluded by the opposition division, but to user oriented programming of an operational motor controller.

- IV. A second notice of appeal was filed by opponent II, SEW Eurodrive, with letter dated and received 31 January 2005. The grounds of appeal were filed with letter dated and received 29 March 2005. Revocation of the patent was requested. Furthermore, reimbursement of the appeal fee was requested. Auxiliary requests were made for remittal to the opposition division and for oral proceedings.

In substance, appellant II based his request for revocation of the patent on an objection of lack of an inventive step (Art. 56 EPC). Considering the Danfoss frequency converter VLT series 3000 as described in the patent as closest prior art it was argued that the subject-matter of claim 1 was obvious to the skilled person in the light of the common general knowledge in

the art or in view of a combination of this prior art with various of the documents on file.

- V. The respondent (patentee), Danfoss Drives, requested in a letter dated 10 February 2005 that the appeals be dismissed. In a letter dated 6 October 2005, it was stated that the description of the Danfoss frequency converter VLT series 3000 as given in the patent was complete and sufficient.
- VI. On 17 January 2007, the board summoned the parties to oral proceedings. Together with the summons, the board issued a communication under Rule 11(1) of the Rules of Procedure of the Boards of Appeal (RPBA).
- VII. In a letter of 18 April 2007 the respondent confirmed dismissal of the appeals as its main request and made an auxiliary request that the patent be maintained on the basis of claims 1 and 2 filed with the same letter.

Independent claim 1 according to the auxiliary request comprises in addition to the features of claim 1 of the main request the further feature

"and wherein the configuration is done by an operator by means of a keyboard or mouse and a graphic, where the graphic (38) is linked with input boxes (33, 34, 35, 36), the method comprising sensing selections on a data representation (37) in the graphic to select setting values for programming the motor controller, and simultaneously changing the values in the input boxes so that the selections in the graphic correspond to the values in the input boxes".

VIII. Oral proceedings took place on 12 June 2007.

During the oral proceedings, the respondent submitted an amended claim 1 and made a new main request that the appeal be dismissed and that the patent be maintained on the basis of this claim. The amended claim 1 adds to feature c) of claim 1 as set out at point I above the feature

"wherein all the relevant parameters are shown in the sequentially guided views,".

Furthermore, the word "whereby" in feature d) is amended into "wherein".

The auxiliary request, see point VII above, was maintained.

The two appellants confirmed their requests as set out at points III and IV above.

After deliberation the chairman announced the board's decision.

### **Reasons for the Decision**

1. The appeals are consolidated in accordance with Article 9(1) RPBA.
2. *Claim 1 of the patent as maintained by the decision of the opposition division: Inventive step (Article 56 EPC)*

2.1 The board considers E1 as the single most relevant prior art document.

E1 discloses:

A method of programming a user interface for initially setting up a motor controller via a computer (col. 1, lines 6-12 referring in particular to the initiation of execution, and col. 2, lines 19-21 referring to motor control) with a monitor displaying different screen displays (see Figures 3 and 4), wherein the operator is guided sequentially through the programming procedure (col. 1, lines 34-36 and 53-56), the method comprising the steps of:

- a) displaying a first view (Fig. 3) with a graphic representation of modes of application (shown as icons 138) of a motor controller, where each mode contains a number of parameters for configuring the motor controller (see Fig. 4 for the example "drill"), these modes of application indicating the basic control principles to be chosen,
- b) selecting one of these modes of application (col. 7, lines 7-8),
- c) in the sequentially guided views (Fig. 4 shows one sequentially guided view) limiting the number of settings and choices to be done by the operator to only contain parameters from the selected mode of application (by excluding parameters related to different modes, e.g. the co-ordinates of start and end points of a linear milling process would not be relevant to a "drill" mode as shown in Fig. 4),



- d) whereby each view consists of a set of family parameters (see Fig. 4 which shows the set of parameters related to the "drill" mode), i.e. functionally related parameters, and
- e) incorporating into each view graphics (see box 160 of Fig. 4) relating to the set of family parameters."
- 2.2 The only difference between the claimed method and the method known from E1 is thus that according to the claim the controller is a frequency converter configured by way of parameters, whereas in E1 the controller is a servo controller (block 70 of Figure 1).
- 2.3 In the board's view it would, at the claimed priority date, have been obvious for the skilled person at least to try to extend a programming method known for a specific type of motor controller to further known motor controllers.

The board cannot see any feature in the claimed method which could be considered specific for frequency converters, nor does the description give any indication in this direction. In fact, the claim essentially relates to a graphical user interface for motor control in general, there being no feature of the interface which would exclude control of the type of motor known from E1. The board is not aware of any technical prejudice which would keep the skilled person from applying the known method to the control of frequency converters, nor has the respondent indicated that such a prejudice exists.

As it would have been obvious to the skilled person that the method known from E1 could be applied to the control of frequency converters, the subject-matter of the unamended claim 1 does not involve an inventive step in the sense of Article 56 EPC.

- 2.4 The respondent argued that the feature "**initially** setting up" (emphasis by the board) provided a further distinguishing feature with respect to the disclosure of E1, "initially setting up" being interpreted as setting up for the first time. Such an interpretation is, however, not supported by the description of the patent in suit. The board considers this feature to mean setting up the motor controller for a particular mode of operation which may or may not be repeated after this set-up procedure. If subsequently another mode of operation were desired a further initial set-up would be required. A procedure for setting up a motor controller for the first time would require measuring a great number of system parameters, as for example the maximum usable motor power, and incorporating these parameters into a set-up program of the type shown in Figures 3-9 of the patent in suit. Nothing in the patent in suit shows that this kind of first time set-up procedure was intended to be covered by the claimed invention.

However, an initial set-up for a particular mode of operation is exactly what is disclosed in E1. In the example shown in Figures 3 and 4, the user makes a choice for a particular operation, drilling in the case of Figure 4, and enters the necessary parameters. This corresponds, in the board's view, to the "initial set-up" in the sense of the patent in suit. Thereafter the

set-up program is executed, possibly repeatedly, to operate the machine (col. 2, 39-42).

- 2.5 The respondent also argued that the term "sequentially guided views" should be interpreted in the sense that the user was led through the views in such a way that all relevant parameters had to be entered by the user in order to set up a particular mode of operation, avoiding situations in which relevant parameters were presented in optional form and could be overlooked or omitted. According to the respondent, this feature implied that the sequence was linear, i.e. without looping back within the series of sequentially guided views. The respondent referred to the flow-diagram of Figure 3 of the patent in suit which showed a linear decision tree without loops. Furthermore, the examples shown in Figures 4-7 of the patent in suit made it evident that all necessary parameters had to be entered without requiring the user to know which parameters were actually necessary. E1 in contrast showed in block 164 of Figure 4 a number of entry fields which were offered as options to the user. The user would have to know which of the fields were necessary for the operation mode in question. If more than one of the fields was necessary, the user had possibly to jump back to the initial view shown in Figure 4.

The respondent's interpretation of the feature in question does not however correspond to what is actually claimed. The term "sequentially guided" does not exclude loops in a sequence of views. If a sequence runs several times through the same view it is still a sequentially guided view. Furthermore, as shown in the example of Figure 5 of the patent in suit with respect

to the "Therminal [sic] Motor Protection" the claimed method also comprises offering the user optional choices which require him to know details about the intended mode of operation to the same extent as the options in block 164 of Figure 4 of E1.

Thus, the board does not agree with the appellant's interpretation of claim 1 and the subject-matter of the unamended claim lacks an inventive step for the reasons set forth above.

3. *Main request: admissibility*

3.1 Claim 1 of the main request as amended in the course of the oral proceedings differs from claim 1 as discussed above merely in that feature (c) is amended by addition of the limitation "wherein all the relevant parameters are shown in the sequentially guided views" and that at the start of feature (d) "whereby" is replaced by "wherein".

3.2 The provision of a set of family parameters is known from E1, see Figure 4 which shows a set of parameters functionally related to the "drill" mode. The requirement that all relevant parameters are shown in the sequentially guided views is arguably not explicitly shown in E1. It is, however, self-evidently desirable for the skilled person to configure a user interface in such a way that it indeed shows all the parameters which have to be entered for a particular mode of operation. Equally, the parameters could be expected to be displayed in a logical sequence.

The modified request thus fails, *prima facie*, to overcome the lack of inventive step objection raised with respect to claim 1 in the form as maintained by the decision of the opposition division.

Therefore, the main request is for this reason alone not admissible (T 231/95, not published in the OJ, point 6.1).

3.3 Moreover, the filing of the modified request at such a late stage of the procedure contradicts the principle of procedural economy (see Article 10b(1) RPBA, OJ EPO 2003, 89). In this context it is observed that the corresponding Article 11(6) of the RPBA stipulates that if oral proceedings take place "The board shall ensure that each case is ready for decision at the conclusion of the oral proceedings, unless there are special reasons to the contrary". In the present case the respondent had the opportunity to submit further requests in response to the board's communication of 17 January 2007, which would have enabled both the board and the appellants to study such a new request. The board observes that subsequent to that communication, and in particular during the oral proceedings, no new facts or arguments on the issue of inventive step with regard to claim 1 as maintained were brought forward, either by the board or by the appellants, which could have justified a modified request.

3.4 As the main request was not admitted into the proceedings the only request to be decided upon was the auxiliary request filed with letter of 18 April 2007.

4. *Auxiliary request: inventive step (Article 56 EPC)*

4.1 Claim 1 according to the auxiliary request adds to claim 1 as maintained by the opposition division firstly the feature of incorporating into each view graphics relating to the set of family parameters. This feature corresponds to the graphics shown in box 160 in Figure 4 of E1.

Furthermore the configuration is done by an operator by means of a keyboard or mouse and a graphic [sic] (which the board understands as a graphical display), where the graphic is linked with input boxes. This feature is also evident from E1 (reference is made to the keys 18 in Figure 1 and the graphics 160 with the corresponding input templates in the form of data lists 162 in Figure 4).

4.2 Finally, the method comprises sensing selections on a data representation in the graphic to select setting values for programming the motor controller, and simultaneously changing the values in the input boxes so that the selections in the graphic correspond to the values in the input boxes.

This latter feature, which is not explicitly known from E1, merely corresponds to an alternative, i.e. graphical, way of entering data, replacing data entry via a keyboard.

E1 shows all the necessary elements for such a data entry method: the screen used in E1 is a touch sensitive screen (col. 2, line 46) and would in principle allow graphical entry of data values.

Furthermore, the example of Figure 4 shows in box 160 a graphic display of the type usable for graphical data entry.

Furthermore, the patent specification does not mention any particular technical difficulties related to the use of a graphical data entry.

The board accordingly concludes that this is merely one of the well-known possibilities available to the skilled person and that the subject-matter of claim 1 of the auxiliary request does not involve an inventive step (Article 56 EPC).

- 4.3 Since the subject-matter of claim 1 of the auxiliary request does not fulfil the requirements of Article 56 EPC this request is not allowable.
5. The only admissible request not being allowable, the patent is revoked.
6. *Request for reimbursement of the appeal fee*

This request, by appellant II, is based on two alleged procedural violations.

- 6.1 The first complaint concerns the choice of the closest prior art by the opposition division, which chose E1 instead of the, allegedly, more suitable converter VLT series 3000 described in the specification of the opposed patent. As is clear from the above discussion, this choice was not erroneous. In any case, according to the established case law a simple error in judgment is not regarded as a procedural violation. Thus, even

if this choice had been found incorrect by the board, it could not have been considered as a procedural violation but as an error made in the exercise of the opposition division's discretion, which is rather the proper subject for the appeal itself (see as an example T 208/00, not published).

6.2 As to the second ground of complaint, appellant II accepted that the decision as a whole was reasoned, but argued that the opposition division simply ignored its arguments as regards E5 which were made in its written submissions filed with the letter dated 24 June 2004. The board notes that the passage of the appealed decision bridging pages 5 and 6, is incorrect in that it states "Concerning document E5 it is noted that the opponent II has not supplied any arguments relating to novelty or inventive step", which leads the board to conclude that the opposition division overlooked the above mentioned submissions. However, the board would make a distinction between an opposition division ignoring the arguments of a party to an extent which infringes the right to be heard, and merely failing to consider in detail all the arguments of the parties and give an opinion on every piece of prior art. The board sees no objection to an opposition division omitting details which are not relevant for the decision (see for example T 177/98, not published, at point 5).

6.3 In the present case however, the question of a procedural violation arises because the opposition division made obvious in its decision that it was not aware of opponent II's submissions on E5. However Rule 67 EPC requires for the reimbursement of the appeal fee that the procedural violation be substantial



and reimbursement be equitable. In the present case, the board notes first that unlike in the decision cited by appellant II (T 135/96), the opposition division stated that it considered E5 "acting of its own motion" and assessed within its power of discretion that it was not relevant - an analysis which was confirmed in the present proceedings. It appears that E5 was not in fact discussed by the parties during the oral proceedings before the opposition division and therefore appeared of less importance. The lack of consideration of the opponent's arguments on this document was thus not conclusive for the outcome of the appealed decision. The mistake made by the opposition division can be regarded as a procedural violation but in this particular case not as a substantial one (see for example J 6/99, not published, at point 10).

- 6.4 Under these circumstances the requirement of Rule 67 EPC for reimbursement of the appeal fee that a substantial procedural violation has taken place is not met.

**Order**

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

1. The decision under appeal is set aside.
2. The patent is revoked.
3. The request for reimbursement of the appeal fee is refused.

The Registrar:

The Chairman:

D. Magliano

A. S. Clelland