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**Datasheet for the decision
of 28 January 2014**

Case Number: T 0496/10 - 3.4.03

Application Number: 04005889.3

Publication Number: 1435548

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Language of the proceedings: EN

Title of invention:
Controller

Patent Proprietor:
OMRON CORPORATION

Opponent:
Wago Verwaltungsgesellschaft mbH

Headword:

Relevant legal provisions:
EPC Art. 123(2), 123(3)
EPC 1973 Art. 100(c)

Keyword:

Decisions cited:
G 0010/91

Catchword:



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Chambres de recours**

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Case Number: T 0496/10 - 3.4.03

**D E C I S I O N
of Technical Board of Appeal 3.4.03
of 28 January 2014**

Appellant:
(Patent Proprietor)

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Decision under appeal:

**Decision of the Opposition Division of the
European Patent Office posted on 28 December
2009 revoking European patent No. 1435548
pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman: G. Eliasson
Members: R. Bekkering
T. Bokor

Summary of Facts and Submissions

- I. The appeal is against the revocation of EP 1 435 548 for added subject-matter, Article 100(c) EPC (main request - patent as granted), added subject-matter and lack of clarity, Articles 123(2) and 84 EPC (first auxiliary request) and for lack of an inventive step, Article 56 EPC (second auxiliary request).
- II. Reference is made to following documents:
- E9: Abstract of JP-A-59 208645
- E10: Abstract of JP-A-06 030043
- E11: Abstract of JP-A-08 129629
- III. Oral proceedings were arranged as requested by the appellant patent proprietor as well as the respondent opponent. The summons to these oral proceedings, dated 17 September 2013, was provided with an annex in which a provisional opinion of the board on the matter was given. It was in particular noted that the amendment to claim 1 according to the appellant's second auxiliary request appeared to extend the protection conferred by the patent, contrary to Article 123(3) EPC.
- IV. At the oral proceedings before the board held on 28 January 2014, the appellant patent proprietor requested that the decision under appeal be set aside and

Main request:

that the opposition be rejected (maintenance of the patent as granted),

First auxiliary request:

that the patent be maintained in amended form on the basis of claims 1 and 2 according to the second auxiliary request filed with the statement setting out the grounds of appeal dated 27 April 2010,

Second auxiliary request:

that the patent be maintained in amended form on the basis of claims 1 and 2 according to the second auxiliary request filed during the oral proceedings.

Moreover, the appellant requested that fresh grounds of appeal [sic] according to Article 100(b) and (c) EPC not be admitted as they did not *prima facie* prejudice the maintenance of the patent and as they were submitted late, Article 114(2) EPC. Further, it was requested that documents E9 to E11 not be admitted in the procedure as they were not *prima facie* relevant and submitted late under Article 114(2) EPC.

V. The respondent opponent requested the dismissal of the appeal.

VI. Claim 1 of the patent as granted reads as follows:

"A programmable controller (1) connected to a terminal (2), the programmable controller (1) comprising: a communication unit (22), coupled through a communication terminal (11) to the terminal (2) which receives input data from an input unit and outputs output data to be applied to an output unit, which executes a serial communication with the terminal (2)

to send the output data to the output unit and to receive the input data from the input unit; and a control unit (18) which executes

- a standby process (TG) for waiting completion of one communication cycle by the communication unit (22),
- an input refresh process (TF) in which input data received from the terminal (2) is taken by the communication unit (22),
- a program execution process (TB) in which a user program is executed based on the latest taken input data,
- an output refresh process (TD) in which the output data obtained by the program execution process (TB) is written into the communication unit (22), and
- again the standby process (TG) to repeat the above-mentioned processes; and,

wherein the input refresh process is executed to take the latest input data just before the execution of the program execution process, the output refresh process is executed just after the execution of the program execution process, whereby the input-and-output response is improved."

VII. Claim 1 according to the appellant's first auxiliary reads as follows:

"A programmable controller (1) connected to a terminal (2), the programmable controller (1) comprising: a communication unit (22), coupled through a communication terminal (11) to the terminal (2) which receives input data from an input unit and outputs output data to be applied to an output unit, which executes a serial communication with the terminal (2)

to send the output data to the output unit and to receive the input data from the input unit; and a control unit (18) which executes in this order:

- an initialization process upon power activation,
- a common process (TA) such as memory-check unless there is any error,
- a standby process (TG) for waiting completion of one communication cycle by the communication unit (22),
- an input refresh process (TF) in which input data received from the terminal (2) is taken by the communication unit (22),
- a program execution process (TB) in which a user program is executed based on the latest taken input data,
- a cycle time computing process (TC),
- an output refresh process (TD) in which the output data obtained by the program execution process (TB) is written into the output register of the logic gate array (26) of the communication unit (22),
- a peripheral port service process (TE), such as a RS-232C port service, and
- again the common process (TA) to repeat the above-mentioned processes;

wherein the input refresh process (TF) is executed to take the latest input data just before the execution of the program execution process (TB), the output refresh process (TD) is executed just after the execution of the program execution process (TB) and the cycle time computing process (TC) to initiate the transmission of the output data, whereby the input-and-output response is improved,

wherein the communication cycle of the communication unit (22) starts with the sending of the output data by the communication unit, and

wherein the communication cycle of the communication unit (22) ends by the receipt of the input data by the communication unit following the sending."

VIII. Claim 1 according to the appellant's second auxiliary request corresponds to claim 1 of the first auxiliary request, with the following deletions, indicated by strike through:

"A programmable controller (1) connected to a terminal (2), the programmable controller (1) comprising: a communication unit (22), coupled through a communication terminal (11) to the terminal (2) which receives input data from an input unit and outputs output data to be applied to an output unit, which executes a serial communication with the terminal (2) to send the output data to the output unit and to receive the input data from the input unit; and a control unit (18) which executes in this order:

- an initialization process upon power activation,*
- a common process (TA) such as memory-check unless there is any error,*
- a standby process (TG) for waiting completion of one communication cycle by the communication unit (22),*
- an input refresh process (TF) in which input data received from the terminal (2) is taken by the communication unit (22),*
- a program execution process (TB) in which a user program is executed based on the latest taken input data,*
- ~~*- a cycle time computing process (TC),*~~
- an output refresh process (TD) in which the output data obtained by the program execution process (TB) is written into the output register of the*

logic gate array (26) of the communication unit (22),

- a peripheral port service process (TE), such as a RS-232C port service, and
- again the common process (TA) to repeat the above-mentioned processes;

wherein the input refresh process (TF) is executed to take the latest input data just before the execution of the program execution process (TB), the output refresh process (TD) is executed ~~just after the execution of the program execution process (TB) and the cycle time computing process (TC)~~ to initiate the transmission of the output data, whereby the input-and-output response is improved,

wherein the communication cycle of the communication unit (22) starts with the sending of the output data by the communication unit, and

wherein the communication cycle of the communication unit (22) ends by the receipt of the input data by the communication unit following the sending."

IX. The appellant patent proprietor essentially argued as follows:

The subject-matter of claim 1 as granted did not extend beyond the content of the application as filed (Article 100(c) EPC). In particular, it did not represent an undisclosed intermediate broadening. Granted claim 1 claimed a generalization of the specific example described in paragraphs [0025] to [0032] of the patent specification and included all essential steps for defining the invention.

Claim 1 according to the first auxiliary request overcame the issues under Article 123(2) EPC.

The second auxiliary request overcame the issues under Article 123(3) EPC. There had been no earlier opportunity to submit this request.

X. The respondent opponent essentially argued as follows:

Documents E9 to E11 were submitted as evidence that a cycle time computing process and a memory check were generally known. The documents became relevant in view of the amendments made in the opposition proceedings. The documents were *prima facie* relevant and should therefore be admitted.

Claim 1 as granted infringed Article 123(2) EPC. The embodiment referred to by the appellant only disclosed a sequence in which the output refresh process was executed just after a cycle time computing process and not just after the program execution process. Claim 1 as granted did not constitute a generalisation of the embodiment but a different sequence. Moreover, in claim 1 as granted the common process and the peripheral service process were unduly omitted.

Claim 1 according to the first auxiliary request extended the protection conferred by the patent as granted and thus contravened Article 123(3) EPC.

The second auxiliary request was late-filed and clearly unallowable as it evidently infringed Article 123(3) EPC. Accordingly, the request should not be admitted into the proceedings.

Reasons for the Decision

1. The appeal is admissible.
2. *Appellant's procedural requests*
 - 2.1 The appellant patent proprietor requested that fresh grounds of appeal [sic] according to Article 100(b) and (c) EPC not be admitted as they did not *prima facie* prejudice the maintenance of the patent and as they were submitted late, Article 114(2) EPC.

Further, it was requested that documents E9 to E11 not be admitted in the procedure as they were not *prima facie* relevant and submitted late under Article 114(2) EPC.

- 2.2 The appellant's requests are understood to be that the fresh grounds of opposition according to Article 100(b) and (c) EPC and documents E9 and E10 not be admitted into the appeal procedure.

The fresh grounds of opposition according to Article 100(b) and (c) EPC and documents E9 to E11 were admitted into the proceedings by the opposition division.

According to established jurisprudence of the boards of appeal, if the way in which a department of first instance has exercised its discretion on a procedural matter is challenged in an appeal, it is not the function of a board of appeal to review all the facts and circumstances of the case as if it were in the place of the department of first instance, and to decide whether or not it would have exercised such

discretion in the same way as the department of first instance. A board of appeal should only overrule the way in which a department of first instance has exercised its discretion if the board concludes it has done so according to the wrong principles, or without taking into account the right principles, or in an unreasonable way (cf "*Case Law of the Boards of Appeal of the EPO*", 7th edition 2013, IV.E.3.6)

According to decision G 10/91 (OJ EPO 1993, 420), the applicable principle is that the consideration of new grounds should only take place in cases where, *prima facie*, there are clear reasons to believe that such grounds are relevant and would in whole or in part prejudice the maintenance of the patent (cf reasons 16).

In the present case the opposition division decided that the subject-matter of claim 1 as granted extended beyond the content of the application as filed. The new ground for opposition under Article 100(c) EPC thus proved relevant. Hence, the opposition division exercised its discretion in an appropriate way. As far as the other new ground for opposition under Article 100(b) EPC is concerned, although in the end it was not found to prejudice the maintenance of the patent (cf decision under appeal, reasons 11 on the second auxiliary request), the board has no indication that the opposition division exercised its discretion according to the wrong principles, without taking into account the right principles, or in an unreasonable way.

Regarding the admission of documents E9 to E11, the opposition division argued that these documents "*became relevant because of the amendments filed by the*

proprietor on 02.11.2009, and the opponent should be given the chance to submit documents which relate to these amendments. Moreover, the documents are short abstracts in English, and the proprietor had sufficient opportunity to study them during the oral proceedings (cf. Guidelines E-III, 8.6, paragraphs 1 and 5)".

Also in this respect, there is no indication that the opposition division exercised its discretion according to the wrong principles, without taking into account the right principles, or in an unreasonable way.

The appellant's foregoing requests for non-admittance are accordingly refused.

3. *Appellant's main request (patent as granted)*

3.1 *Amendments*

3.1.1 According to claim 1 as granted, *"the input refresh process is executed to take the latest input data just before the execution of the program execution process, the output refresh process is executed just after the execution of the program execution process, whereby the input-and-output response is improved"*.

3.1.2 According to the appellant, the basis for this feature was to be found in the description of the application as originally filed, page 12, line 12 to page 15, line 6, and in particular on page 13, lines 4 to 9. The other processes, and in particular the cycle time computing process were not essential features of the invention, so that their omission did not contravene the requirement of Article 123(2) EPC.

3.1.3 However, according to the passage referred to by the appellant, *"In this embodiment, the input refresh process is executed to take the latest input data just before the execution of the program execution process, the output refresh process is executed just after the execution of the program execution process and the cycle time computing process to initiate the transmission of the output data, whereby the input-and-output response is improved"* (page 13, lines 4 to 9).

In the only detailed embodiment provided in the application as filed, the microprocessor 18 executes

- an initialization process upon power activation,
- a common process (TA) such as memory check or the like unless there is any error,
- a standby process (TG) for waiting completion of one cycle by the communication means 22,
- an input refresh process (TF) in which input data received from the terminal 2 is taken by the communication means 22,
- a program execution process (TB) in which a user program is executed based on the latest taken input data,
- a cycle time computing process (TC),
- an output refresh process (TD) in which the output data obtained by the program execution process (TB) is written into the output register of the logic gate array 26 of the communication means 22,
- a peripheral port service process (TE) such as a RS-232C port service and a peripheral port service, and
- again the common process (TE) [sic] to repeat the above-mentioned processes (cf description, page 12, line 12 to page 13, line 3 and figure 8).

Figure 9 is a timing chart for explaining the minimum and maximum input-and-output response time of the programmable controller of this embodiment. In particular, as shown in figure 9 at (A) and (B), when there appears a change of an input before start of the communication time, the change of the input is taken by the input refresh process TF1 after the end of the communication time, the program execution process and the cycle time process are executed in response to the input, the communication is begun to transmit to the terminal 2 in response to the subsequent output refresh process TD1, and the output of the terminal 2 is changed as shown in Figure 9 at (C). As shown in figure 9 at (A) and (D), when there appears a change of the input after start of the communication time, the change of the input is taken by the input refresh process TF2 after end of the subsequent cycle communication time because it is not in time for the current communication cycle, the program execution process and the cycle time computing process are executed based on the input, the communication is begun to transmit to the terminal 2 in response to the subsequent output refresh process TD2, and the output of the terminal 2 is changed as shown in figure 9 at (E) (cf description, page 13, line 19 to page 14, line 18).

Thus, also from figure 9 it is clear that a cycle time computing process is executed after the execution of the program execution process.

Accordingly, in the embodiment disclosed, the output refresh process (TD) is not executed "just" after the execution of the program execution process (TB).

Neither would it be clear from the application as filed that the cycle time computing process is not essential

to the invention. As argued by the appellant, in particular from figure 8 it is clear which cycle time is computed. Moreover, a person skilled in the art would generally know how to compute such a cycle time, so that, although as pointed out by the respondent little detail is provided in the application regarding this process, it is sufficiently disclosed. In this respect reference is made to documents E9 and E10 referring to the calculation of a cycle time. Moreover, there is no indication in the application that this process might be inessential and thus might be omitted.

The restriction that the output refresh process is executed "just" after the execution of the program execution process is also not disclosed elsewhere in the application as originally filed. According to claim 1 as originally filed as well as the description under "*Summary of the invention*", the program execution process is executed between the input process and a (its) subsequent output process, and the other process is executed between the output process and a (its) subsequent input process (cf page 4, lines 13 to 22).

Accordingly, the restriction that the output refresh process is executed "just" after the execution of the program execution process introduces subject-matter which extends beyond the content of the application as filed (Article 100(c) EPC 1973, Article 123(2) EPC).

Moreover, it is noted that also the omission in claim 1 as granted of the feature present in claim 1 as originally filed that the control unit, in addition to the input, program execution and output processes, also executes another process (eg a peripheral service process, a memory check) which is executed between the output process and a subsequent input process, results

in subject-matter which extends beyond the content of the application as filed. In fact as apparent from the description, according to the invention the input-and-output response is improved by effectively using the time from the beginning to the finish of the communication in response to the output refresh process to execute the other process (page 4, lines 13 to 22; page 13, lines 11 to 18).

Hence, the ground for opposition mentioned in Article 100(c) EPC 1973 prejudices the maintenance of the patent as granted, Article 101(2) EPC.

4. *Appellant's first auxiliary request*

4.1 *Amendments*

Claim 1 as granted defines that the control unit executes the output refresh process "*just*" after the execution of the program execution process.

Claim 1 according to the appellant's first auxiliary request has *inter alia* been amended to define that the output refresh process (TD) is executed just after the execution of the program execution process (TB) and the cycle time computing process (TC) to initiate the transmission of the output data.

Thus, according to claim 1 as amended the control unit no longer executes the output refresh process "*just*" after the execution of the program execution process but only "*just*" after the cycle time computing process (TC).

Clearly, where the protection conferred by claim 1 as granted does not cover a programmable controller

comprising a controller unit which executes a cycle time computing process (TC) between the program execution process (TB) and the output refresh process (TD), the protection conferred by claim 1 according to the appellant's first auxiliary request does.

Thus, although a feature has been added to claim 1, the protection conferred is not restricted, but rather it is extended to an *aliud*, ie something different.

Accordingly, the amendment extends the protection conferred by the patent, contrary to Article 123(3) EPC.

The appellant's first auxiliary request is, therefore, not allowable.

5. *Appellant's second auxiliary request*

The amended claims according to the appellant's second auxiliary request were filed during the oral proceedings before the board.

Insofar as the amendments made sought to overcome the objection under Article 123(3) EPC, this issue was explicitly mentioned in the annex to the summons to the oral proceedings, so that the appellant could have filed the new request earlier, well before the date of the oral proceedings.

This new request was accordingly late-filed, its admission into the proceedings thus being at the discretion of the board.

According to established jurisprudence of the boards of appeal, requests filed during oral proceedings, as a

general rule, are only admitted if it is readily apparent that the amendments overcome the issues raised and do not give rise to any new ones (cf "*Case Law of the Boards of Appeal of the EPO*", 7th edition 2013, IV.E.4.2.3)

Claim 1 according to the appellant's second auxiliary request, with respect to the first auxiliary request, has *inter alia* been amended by deletion of the restriction that the output refresh process (TD) is executed "*just after the execution of the program execution process (TB) and the cycle time computing process (TC)*".

Clearly, this amendment raises at least further issues under Article 123(3) EPC.

The board, therefore, exercises its discretionary powers not to admit this request into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



S. Sánchez Chiquero

G. Eliasson

Decision electronically authenticated