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**Datasheet for the decision
of 7 June 2017**

Case Number: T 1055/13 - 3.5.03

Application Number: 01933150.3

Publication Number: 1290513

IPC: G05B19/05

Language of the proceedings: EN

Title of invention:

TWO-WIRE FIELD-MOUNTED PROCESS DEVICE

Patent Proprietor:

Rosemount Inc.

Opponents:

1. Endress+Hauser Wetzler GmbH + Co. KG
2. Pepperl & Fuchs GmbH

Headword:

Two-wire field-mounted process device/ROSEMOUNT

Relevant legal provisions:

EPC Art. 100 (c), 123 (2)

Keyword:

Added subject-matter (yes) - all requests

Decisions cited:

G 0001/93

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

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Case Number: T 1055/13 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 7 June 2017

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 26 February
2013 revoking European patent No. 1290513
pursuant to Article 101(2) and 101(3) (b) EPC.**

Composition of the Board:

| | |
|-----------------|------------------|
| Chairman | F. van der Voort |
| Members: | T. Snell |
| | O. Loizou |

Summary of Facts and Submissions

- I. This case concerns the appeal of the patent proprietor (henceforth, appellant) against the decision of the opposition division to revoke European patent No. 1 290 513.
- II. Admissible oppositions to the patent were filed by two opponents (henceforth respondents O1 and O2), opponent O1 citing, inter alia, Article 100(c) EPC.
- III. The opposition division issued a decision revoking the European patent as the ground for opposition pursuant to Article 100(c) EPC prejudiced the maintenance of the patent as granted. In addition, the opposition division held that the subject-matter of claim 1 respectively of five auxiliary requests did not involve an inventive step.
- IV. In the notice of appeal, the appellant requested that the impugned decision be set aside and that the patent be maintained [as granted], i.e., implicitly, that the oppositions be rejected. With the statement of grounds of appeal, the appellant filed claims of five auxiliary requests.
- V. In subsequent replies to the appeal, both respondents requested that the appeal be dismissed.
- VI. In a communication accompanying a summons to oral proceedings, the board gave a preliminary opinion that, inter alia, claim 1 of the main request did not comply with Article 123(2) EPC, i.e. that the ground for opposition pursuant to Article 100(c) EPC prejudiced the maintenance of the patent. The board also gave a preliminary opinion that claim 1 of each of the

auxiliary requests did not comply with Article 123(2) EPC as the reasons given in connection with claim 1 of the main request in part applied to claim 1 of each of these requests too.

VII. Oral proceedings took place on 7 June 2017 in the presence of both respondents. The appellant informed the board by fax on the same day that it would not attend the oral proceedings.

The appellant requested in writing that the decision under appeal be set aside and, implicitly, that the oppositions be rejected (main request) or, in the alternative, that the patent be maintained in amended form on the basis of the claims of one of first to fifth auxiliary requests, all auxiliary requests as filed with the statement of grounds of appeal.

Respondents O1 and O2 requested respectively that the appeal be dismissed.

At the end of the oral proceedings, the chairman announced the board's decision.

VIII. Claim 1 as granted (**main request**) reads as follows:

"A two-wire field-mountable process device (16) comprising:

a power module (38) couplable to a two-wire loop and adapted to wholly power the process device with power received from the two-wire loop;

a loop communicator (36) coupled to the power module, and being couplable to the two-wire loop to communicate on the two-wire loop;

a controller (40) coupled to the loop communicator and power module;

a first channel (42) operably coupled to the controller, the first channel being configured to couple to each of a plurality of process interface elements through a respective terminal from a plurality of first terminals; and

a second channel (44) operably coupled to the controller, the second channel being configured to couple to each of a plurality of second process interface elements through a respective terminal from a plurality of second terminals, wherein the first and second channels are electrically isolated from the remainder of the process device."

IX. Claim 1 of the **first auxiliary request** begins as claim 1 of the main request. Beginning with the wording "a first channel ...", the claim then reads as follows:

"a first channel (42) operably coupled to the controller and comprising a first multiplexer (66), the first channel being configured to couple to each of a plurality of process interface elements through a respective terminal from a plurality of first terminals, each of the first terminals being adapted to couple a single process interface element to the first multiplexer; and

a second channel (44) operably coupled to the controller and comprising a second multiplexer (66), the second channel being configured to couple to each of a plurality of second process interface elements through a respective terminal from a plurality of

second terminals, each of the second terminals being adapted to couple a single process interface element to the second multiplexer, wherein the first channel is electrically isolated from the remainder of the process device and wherein the second channel is electrically isolated from the remainder of the process device."

- X. Claim 1 of the **second auxiliary request** is the same as claim 1 of the main request except that the following wording is added to the end of the claim:

"and wherein the first channel (42) is configured to couple to a first type of process interface element and the second channel (44) is configured to couple to a second, different type of process interface element".

- XI. Claim 1 of the **third auxiliary request** is the same as claim 1 of the main request except that the wording "via an interface bus (54)" is inserted following the wording "a first channel (42) operably coupled to the controller", and the wording "via the interface bus" is inserted following the wording "a second channel (44) operably coupled to the controller".

- XII. Claim 1 of the **fourth auxiliary request** is the same as claim 1 of the main request except that the following wording is added to the end of the claim:

"and wherein the first channel (42) is configured to couple to a first type of sensor and the second channel is configured to couple to a second, different type of sensor".

- XIII. Claim 1 of the **fifth auxiliary request** is the same as claim 1 of the main request except that the following wording is added to the end of the claim:

"and wherein the first channel (42) is configured to couple to a type of sensor and the second channel is configured to couple to digital inputs or actuators".

Reasons for the Decision

1. *Main request - claim 1: added subject-matter (Article 100(c) EPC*

1.1 This decision confirms the decision of the opposition division to revoke the patent based on the ground for opposition pursuant to Article 100(c) EPC (cf. Article 123(2) EPC), but for different reasons. In this respect, two amendments to claim 1, discussed in points 5.2 and 5.3 of the decision under appeal, were held by the opposition division to comply with Article 123(2) EPC. The board however has come to a different conclusion on these matters.

1.2 The first amendment concerns the replacement of the wording "two-wire process control loop" in claim 1 as originally filed by "two-wire loop" (cf. point 5.2 of the decision).

The second amendment concerns the deletion of the wording "and the power module" in "a first channel operably coupled to the controller and the power module" from claim 1 as originally filed (cf. point 5.3 of the decision).

1.3 Regarding the first amendment:

1.3.1 The test for compliance with Article 123(2) EPC is that an amendment must be directly and unambiguously based

on the application documents as filed. The essential purpose of Article 123(2) EPC is to prevent an applicant from getting an unwarranted advantage by obtaining patent protection for something he had not properly disclosed and maybe not even invented on the date of filing of the application (cf. G 1/93, OJ 1994, 541, point 16 of the reasons). It follows that where there is doubt, Article 123(2) EPC is infringed.

- 1.3.2 In the present case, the question at issue is whether or not the skilled person would plausibly understand the term "two-wire loop", when used in connection with a field-mountable process device, as embracing embodiments not covered by the term "two-wire process control loop".
- 1.3.3 The application as filed is directed to the control of field-mounted devices in industrial systems (cf. page 1, line 7, to page 2, line 24, referring as regards citations from the description henceforth to the international application as published (publication number WO 01/88644 A2)). In such systems, as is well-known in the art, sensors and actuators are linked to a central controller by a two-wire process control loop (cf. page 1, lines 16 to 19, and page 2, lines 32 to 35).

Further, claim 1 as filed is directed to a two-wire field-mountable device comprising a power module couplable to a *two-wire process control loop* and adapted to wholly power the process device with power received from the *two-wire process control loop* (see also the description, the summary, page 5, lines 2 to 4).

The board further notes the following statement in the

detailed description of the preferred embodiments regarding the two-wire process loop 14:

"Loop 14 is a two-wire process control loop" (cf. page 6, lines 7 to 10, and line 34).

- 1.3.4 The question to be answered is: what would the skilled person understand here by the term "two-wire process control loop"?
- 1.3.5 Examples of two-wire process control loops are given in the description, which may use 4-20 mA signalling (cf. page 3, lines 10-13, and page 6, line 34 to page 7, line 7). It is stated further that "Although two-wire process control systems provide wiring simplification, such systems provide a limited amount of electrical power to connected devices" (cf. page 3, lines 7-10) and "The frugal power budget of two-wire process devices has traditionally limited the functionality that could be provided" (cf. page 3, lines 13-15). In the board's view, the skilled person reading these passages would likely understand the term "two-wire process control loop" as referring to a particular type of low-power loop commonly used in industrial control systems, e.g. using 4-20 mA signalling, whereas the term "two-wire loop" might embrace other not originally contemplated embodiments such as a telephone line, or even a pair of rail tracks. This interpretation also implies corresponding constructional features of the power module and the loop communicator of the claimed device. The board further notes that the above-cited statement on page 6, line 34 ("Loop 14 is a two-wire process control loop") also suggests that a two-wire process control loop may be something more specific than a two-wire loop.

- 1.3.6 The opposition division argued essentially that any two-wire loop when used with power and data communications and a process to control would become a "two-wire process control loop". In the board's view, however, the technical feature "two-wire process control loop" cannot unambiguously be interpreted only in accordance with the literal meaning of the words, since the expression in the present context may imply the presence of other features, for example technical restrictions implied by the low-power signalling, as discussed above.
- 1.3.7 Consequently, the deletion of the words "process control" in claim 1 results in subject-matter being claimed which is not directly and unambiguously derivable from the application as filed, contrary to Article 123(2) EPC.
- 1.4 Regarding the second amendment:
- 1.4.1 The opposition division considered that the omitted wording "and the power module" from the phrase "a first channel operably coupled to the controller and the power module" was still implicitly comprised in claim 1 by virtue of the presence of the feature "a power module ... adapted to wholly power the process device", as the channels were part of the process device and thus necessarily needed to obtain power from the power module. The board however disagrees for the following reasons.
- 1.4.2 In accordance with claim 1, it is possible for the channels to be powered by the controller (or other component). This implies that the channels need not be directly "operatively coupled to the power module". The reasoning by the opposition division is based on

interpreting "operatively coupled" as embracing "indirectly coupled". However, the application as filed does not provide a basis for such an interpretation, since an embodiment in which the channels are indirectly coupled to the power module is not originally disclosed or even hinted at. In this respect, the board notes that the description and drawings as filed rather suggest that "operably coupled to the power module" is not to be understood as embracing indirect coupling, for example via the controller, but means that there is a direct coupling to each channel, as indicated by the letters P in Fig. 2 (cf. also page 11, line 34 to page 12, line 6, page 9, lines 16-18 of the application as filed).

1.4.3 As there is no direct and unambiguous basis in the application as filed for embodiments in which the first channel is not operatively coupled to the power module, claim 1 has been amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, contrary to Article 123(2) EPC.

2. *First to fifth auxiliary requests - claim 1: Added subject-matter (Article 123(2) EPC)*

The above objections apply, mutatis mutandis, to claim 1 of each of the first to fifth auxiliary requests.

3. The appellant has not commented on the above objections, which were raised in essence in the board's communication accompanying the summons to oral proceedings.

4. *Conclusion*

The board concludes that the ground for opposition pursuant to Article 100(c) EPC prejudices the maintenance of the patent as granted, whilst the patent as amended in accordance with any one of the auxiliary requests does not meet the requirement of Article 123(2) EPC. It follows that the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Rauh

F. van der Voort

Decision electronically authenticated