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**Datasheet for the decision
of 18 December 2009**

Case Number: T 0161/08 - 3.2.05

Application Number: 95903773.0

Publication Number: 0792428

IPC: F16K 37/00

Language of the proceedings: EN

Title of invention:

An apparatus for controlling a valve

Patentee:

Alfa-Laval Kolding A/S

Opponents:

GEA Tuchenhausen GmbH
APV Rosista GmbH
i f m electronic gmbh

Headword:

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Relevant legal provisions:

EPC Art. 54, 56, 123(2)

Relevant legal provisions (EPC 1973):

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Keyword:

"Amendments (allowable)"
"Novelty (yes)"
"Inventive step (yes)"

Decisions cited:

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Catchword:

-



Case Number: T 0161/08 - 3.2.05

DECISION
of the Technical Board of Appeal 3.2.05
of 18 December 2009

Appellant:
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 24 October 2007 rejecting the opposition filed against European patent No. 0792428 pursuant to Article 102(2) EPC 1973.

Composition of the Board:

Chairman: W. Zellhuber
Members: P. Michel
E. Lachacinski

Summary of Facts and Submissions

I. The appellant (opponent 02) lodged an appeal against the decision of the Opposition Division rejecting the opposition filed against European Patent No. 0 792 428.

II. The appellant requests that the decision under appeal be set aside and that the European Patent No. 0 792 428 be revoked. A request for oral proceedings was withdrawn by a letter dated 13 November 2009.

The respondent (patentee) requests dismissal of the appeal.

No requests have been made by the parties as of right (opponents 01 and 03).

III. The following document has been referred to in the appeal proceedings:

D4: DE-A-42 18 320

IV. Claims 1 and 10 as granted read as follows:

"1. An apparatus for controlling a valve (1) at desired fixed end positions, of the type which comprises a magnetic valve (3) which supplies an amount of fluid to a pressure cylinder which activates the valve (1), and wherein the valve stem (4) is provided with a linear position indicator (5) which gives a series of readings during the movement of the valve stem (4), **characterized in that** the readings relating to the desired fixed end positions are stored in a data store (8) during a first activation of the valve,

whereby the result of subsequent activations of the valve is determined by comparing the instant reading with a stored reading for the desired fixed end position, and that a calculating unit calculates the average value of a predetermined number of latest obtained and accepted position indications corresponding to a desired position and uses this value as the stored position indication for the subsequent monitoring of the presently obtained position indication."

"10. Method for controlling and monitoring a valve as disclosed in claim 1 at desired fixed end positions, said method comprising the following steps:

- a) readings relating to the desired fixed end positions are stored in a data store (8) during a first activation of the valve,
- b) a calculating unit calculates the average value of a predetermined number of latest obtained and accepted position indications corresponding to a desired position,
- c) the result of subsequent activations of the valve is determined by comparing the instant reading with a stored reading for the desired fixed end position
- d) repetition of steps b) and c)."

V. The appellant has argued substantially as follows in the written procedure:

Claim 1 has been amended so as to refer to "at desired fixed end positions" rather than "between a number of fixed positions". The feature "readings relating to the desired fixed positions are stored in a data store

during a first activation of the valve" has been replaced by "readings relating to the desired fixed end positions are stored in a data store during a first activation of the valve". In particular, there is no disclosure in the application as filed of a plurality of end positions or desired end positions. The subject-matter of claim 1 is thus not disclosed in the application as filed.

The same objections apply to method claim 10. In addition, there is no disclosure in the application as filed of the sequence of steps specified in claim 10.

The subject-matter of claim 1 is not new in view of the disclosure of document D4. The passage at page 5, lines 32 and 33, of document D4 discloses obtaining a system parameter on the basis of the position of the valve stem.

VI. The respondent has argued substantially as follows in the written procedure:

The subject-matter of claims 1 and 10 is disclosed in the application as filed. In particular, page 1, lines 18 to 20 refers to fully open and fully closed positions. At page 2, lines 20 to 35, it is disclosed that changes in the fixed positions of the valve due to wear or the like are monitored over time.

The present invention uses a physical reading of the actual position of the valve stem. Document D4 discloses a method and apparatus in which pressure measurements are carried out at opening and closing of the valve. Page 5, lines 32 and 33 of document D4

refers to a system parameter on which the condition of the valve is determined being based on a combination of "Hubverlauf" and "Druckverlauf", and thus not on the basis of the actual position of the valve stem.

The subject-matter of claims 1 and 10 is thus new.

Reasons for the Decision

1. *Amendments*

In the application as filed, in the context of a discussion of the background of the invention, it is disclosed that position signals "are typically generated by microswitches which may be fitted so that they have a well-defined position at closed, open, or the desired position therebetween. In the case that a monitoring signal has to be given for "fully open" and "fully closed" two microswitches are used" (published version of the application as filed, page 1, lines 15 to 20).

In a subsequent statement of invention, it is disclosed that "readings relating to the desired fixed position are stored in a data store during a first activation of the valve, whereby the result of subsequent activations of the valve is determined by comparing the instant reading with a stored reading for a desired fixed position" (page 2, lines 9 to 13). Reference is further made to "desired positions" at page 2, line 19 and to "fixed points" at page 2, line 24.

The application as filed thus discloses that the valve may be controlled at one or more desired fixed positions, and that these positions may include the end positions.

The person skilled in the art would understand from the description of the application as filed, in particular at page 2, lines 9 to 13, that a desired fixed position is ascertained during a first activation of the valve and that subsequent position indications are compared with this desired position.

The application as filed thus discloses the feature of claim 1 according to which the apparatus is for controlling a valve "at desired fixed end positions".

This also applies to the subject-matter of claim 10, which relates to a method for controlling and monitoring the valve of claim 1 and specifies method features corresponding to the apparatus features of claim 1. Claim 3 as originally filed discloses that the step of calculating the average value of a predetermined number of latest obtained and accepted position indications corresponding to a desired position precedes the step of determining the result of subsequent actuations of the valve by comparing the instant reading with a stored reading for the desired end position. The specified sequence of steps is thus also disclosed in the application as filed.

The subject-matter of claims 1 and 10 as granted is thus disclosed in the application as filed and the requirement of Article 123(2) EPC is satisfied.

2. *Novelty*

Document D4 discloses an apparatus and method for controlling a valve in which position readings relating to desired fixed end positions are stored. However, it is a value of a system parameter, combining a position reading with pressure, which is compared with a stored reference value rather than a position reading being compared with a desired fixed end position (see, for example, page 2, lines 22 to 30 and page 4, lines 30 to 35). The passage in document D4 at page 5, lines 32 and 33 is not construed as indicating that a position reading is utilized without a pressure reading.

The subject-matter of claims 1 and 10 is thus new and the requirement of Article 54 EPC is satisfied.

3. *Inventive Step*

The appellant has not raised any objections of lack of inventive step. There are no reasons of which the Board is aware to depart from the conclusions of the opposition division as set out in paragraphs 22 to 28 of the decision under appeal.

The subject-matter of claims 1 and 10 of the patent in suit thus involves an inventive step. Claims 2 to 9 are dependant from claim 1 and relate to preferred features of the apparatus of claim 1. The subject-matter of these claims thus involves an inventive step for the same reasons.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber