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D E C I S I O N
of 23 February 2004

Case Number: T 0615/01 - 3.2.4

Application Number: 93201777.5

Publication Number: 0576086

IPC: A01J 7/00

Language of the proceedings: EN

Title of invention:

A construction for automatically milking animals, such as cows

Patentee:

Maasland N.V.

Opponent:

Prolion B.V.

Headword:

Disturbance/MAASLAND

Relevant legal provisions:

EPC Art. 56

Keyword:

"Inventive step (no)"

Decisions cited:

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Catchword:

-



Case Number: T 0615/01 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 23 February 2004

Appellant: Prolion B.V.
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 28 March 2001
rejecting the opposition filed against European
patent No. 0576086 pursuant to Article 102(2)
EPC.

Composition of the Board:

Chairman: C. A. J. Andries
Members: P. Petti
H. Preglau

Summary of Facts and Submissions

- I. The opposition filed against the European patent EP-B-576 086 was rejected by the decision of the opposition division dispatched on 28 March 2001.

Claim 1 of the patent as granted reads as follows:

"1. A construction for automatically milking animals, such as cows, comprising a milking robot including milking means, as well as a computer (85) with display screen (82), the construction including a plurality of exchangeable parts provided with means for sensing when the exchangeable parts are not functional and for signalling the conditions to the computer (85), characterized in that on the basis of the sensed condition, the display screen (82) displays which part is out of order, while the construction includes means for indicating whether a disturbance in the construction reported on the display screen (82) is serious or not so serious and the exchangeable parts are provided in the construction by means of one or a plurality of quick couplings (44, 56)."

- II. In its decision the opposition division held that the subject-matter of claim 1 of the patent as granted involved an inventive step over the combination of document GB-A-2 218 888 (D1), which was considered as disclosing a construction having all the feature specified in the pre-characterising portion of claim 1, and document US-A-4 459 695 (D2).

III. In the opposition proceedings the following documents, filed by the opponent on 26 February 2001, were disregarded by the opposition division because they had been filed after expiry of the opposition period as specified in Article 99(1) EPC and were considered by the opposition division as being not relevant:

D6B: Master's Thesis by E. van Hattum, "*Regelconsole Automatisch Melk Systeem*", Department of Industrial Design, Technical University Delft, pages 1, 88 to 91;

D6C: Enclosures ("*Bijlagen*") to the above mentioned Master's Thesis, Index of the enclosures, pages 14, 15 and 29.

With regard to these documents, the opponent had also filed a declaration (document D6A) by Mr Jansen, Head of the Faculty Library Industrial Design Engineering, dated 19 February 2001, concerning the public availability of the above mentioned Master's Thesis. The opponent had also filed English translations of relevant passages of documents D6B and D6C.

IV. On 29 May 2001 the opponent (hereinafter appellant) lodged an appeal against this decision and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 7 August 2001.

V. Oral proceedings were held on 23 February 2004.

The appellant essentially argued that the subject-matter of Claim 1 of the patent as granted either was not novel or did not involve an inventive step.

The respondent contested the arguments of the appellant.

- VI. The appellant requested that the appealed decision be set aside and the patent be revoked.

The proprietor of the patent (hereinafter respondent) requested that the appeal be dismissed.

Reasons for the decision

1. The appeal is admissible.
2. *The claimed subject-matter*
 - 2.1 Claim 1 of the patent as granted is directed to a construction having the following features:
 - (A) the construction is suitable for automatically milking animals, such as cows,
 - (B) the construction comprises a milking robot including milking means,
 - (C) the construction comprises a computer (85) provided with display screen (82),
 - (D) the construction includes a plurality of exchangeable parts,

(D1) the exchangeable parts are provided with sensing means for sensing when the exchangeable parts are not functional and for signalling the conditions to the computer,

(C1) the display screen, on the basis of the sensed condition, displays which part is out of order,

(E) the construction comprises means for indicating whether a disturbance in the construction reported on the display screen is serious or not so serious,

(D2) the exchangeable parts are provided in the construction by means of one or a plurality of quick couplings (44, 56).

2.2 Features D and D1 refer to "exchangeable parts" and make it clear that the construction is made of a plurality of exchangeable parts, i.e. of parts which can be replaced when they are not functional. The term "exchangeable" in features D and D1 only defines the possibility of replacing one of the parts without replacing the remaining parts, while feature D2 makes it clear how the parts are made "exchangeable".

2.3 The terms "not functional" in feature D1 has to be considered as having the same meaning as the expression "out of order" in feature C1. A part of the construction which is "not functional" or "out of order" is a part of the construction causing a "disturbance" as referred to in feature E.

3. *Analysis of documents D6A, D6B and D6C*

3.1 Documents D6B and D6C are excerpts from the Master's Thesis "*Regelconsole Automatisch Melk Systeem*" presented by Mr van Hattum at the Department of Industrial Design of the University of Delft.

It can be derived from the declaration D6A that this Master's Thesis was made available to the public on 14 April 1990, i.e. before the priority date of the patent in suit. This was not disputed by the parties.

3.2 Documents D6B and D6C relate to an automatic milking system (AMS: "*Automatisch Melk Systeem*"). It is clear from document D6B (page 1, "*Inleiding*") that the AMS comprises a milking robot and a computer ("*regelconsole*") with a monitor having a display screen, a keyboard and a printer. Thus, it is clear that this AMS comprises a plurality of parts.

It is also clear from document D6B (see particularly paragraph 4 on page 88 as well as Figure 36 on page 89 and Figure 37 on page 90) that the display screen of the computer displays an alarm signal in case of a harmful situation ("*schadelijke situatie*") which may concern the cow, the AMS or the herd and that when the alarm concerns the AMS a plan view of the AMS is shown with an alarm triangle "at the location where it went wrong". By way of example, Figure 37 makes it clear that the harmful situation indicated on the display screen may relate to a "line" (which may be ruptured) or to the "boiler" (which may be out of order).

It is clear from document D6C that the alarm signal must be extremely well noticeable and contain sufficient information for further actions so that the consequences of the alarm situation are kept down to a minimum (see page 14, fourth last paragraph).

Document D6C also suggests the idea of presenting to the farmer an overview of the alarm signals with the most urgent at the top (see page 29, second paragraph; "*Commando: Alarmen*").

Furthermore, according to document D6B (see particularly paragraph 5 on page 90 as well as Figure 38 on page 91), the display screen of the computer displays an attention signal when a disadvantageous situation (which may concern the cow, the AMS or the herd) occurs within a determined time ("als een nadelige situatie ... binnen een bepaalde tijd optreedt").

4. *Comparative analysis of the AMS disclosed in documents D6B and D6C with the claimed subject-matter*

4.1 The AMS referred to in documents D6B and D6C has to be considered as a construction for automatically milking animals as defined by feature A of Claim 1. It is clear that the milking robot comprises milking means as defined by feature B of Claim 1 and that the computer is provided with a display screen as defined by feature C of Claim 1. Moreover, it has to be assumed that the parts constituting the AMS may be replaced, i.e. that they are exchangeable as defined by feature D. Due to the fact that the alarm signals concern the parts of the AMS, these parts must be provided with sensing

means for sensing when they are not functional and for signalling the conditions to the computer, whose display screen, on the basis of the sensed condition, displays which part is out of order as defined by features D1 and C1 of Claim 1.

Thus, it has to be assumed that the construction referred to in documents D6B and D6C is provided at least with features A, B, C, D, C1 and D1.

- 4.2 Having regard to the above comments, documents D6B and D6C not only refer to an automatic milking system which is described as being provided with the features specified in the pre-characterising portion of Claim 1, i.e. features A, B, C, D and D1 but also clearly C1 which is specified in the characterising portion of the claim.

Therefore, this document has to be considered as being relevant in so far as it relates to a prior art construction which is closer to the claimed invention than that described in document D1.

- 4.3 With respect to feature E, it has to be noted that document D6C suggests the idea of providing the construction with means for indicating the degree of urgency of an alarm notice (see page 29, second paragraph; "*Commando: Alarmen*"), i.e. with means for indicating the seriousness of a disturbance.

- 4.3.1 With respect to feature E, the appellant argued that the alarm signals referred to in documents D6B and D6C have to be considered as indicating "serious" disturbances in the AMS, while the attention signals

indicate disturbances which are "not so serious", so that it has to be assumed that documents D6B and D6C also disclose feature E of claim 1.

In these respects the respondent essentially argued as follows:

(i) The attention signal referred to in documents D6B and D6C appears when a disadvantageous situation occurs within a determined time without indicating which disadvantageous situation occurs. According to these documents, the operator can get more information by pushing an attention button. Therefore, this attention signal cannot represent an indication that the disturbance "reported on the display screen" is "not so serious".

(ii) The attention signals shown in Figure 38 on page 91 of document D6B essentially concern the cow and, thus, do not represent the indication of a disturbance in the construction.

4.3.2 The board wishes to note that the attention signal is referred to on page 90 of document D6B as relating not only to the cow and the herd but also to the AMS. In other words, the attention signal may also indicate a disturbance in the construction. However, the attention signal does not immediately indicate which part of the construction is out of order.

4.4 With respect to feature D2 the appellant argued that all automatic milking systems comprise exchangeable parts which are provided with quick couplings and that, for this reason, the automatic milking system referred

to in documents D6B and D6C has to be considered as being provided with feature D2.

- 4.4.1 The board cannot accept this argument of the respondent because documents D6B and D6C do not contain any information on how the parts of the AMS are mounted. Therefore, quick couplings are neither explicitly nor implicitly disclosed in these documents.

5. *Novelty*

Having regard to the comments in the above sections 4.1, 4.4 and 4.4.1, the subject-matter of Claim 1 is considered as being novel with respect to the AMS referred to in documents D6B and D6C.

6. *Inventive step*

- 6.1 Having regard to the comments in the above section 4.1, the subject-matter of claim 1 differs from the prior art known from documents D6B and D6C by features E and D2.

- 6.2 The result of feature E, in so far as it relates to means for indicating a further information concerning the disturbance occurred in a part of the construction (namely the information of whether the disturbance is serious or not so serious), is to provide the user of the construction with this further information.

The result of feature D2 is to reduce the time necessary for replacing an exchangeable part which is out of order.

It has to be noted that the time reduction obtained in account of feature D2 has no relationship to the information to which feature E relates.

6.3 Feature D2 represents a generally known engineering measure. The skilled person would apply this measure in a construction for automatically milking animals without exercising any inventive skill. Therefore, this feature does not involve an inventive step.

6.4 With regard to feature E, it has to be noted that the information of whether the disturbance is serious or not so serious is linked to the functions of the part in which the disturbance has occurred.

According to document D6C (page 29, second paragraph: "*Commando: Alarmen*"), an overview of disturbances for which there is an alarm with the most serious at the top can be presented to the user of the AMS. This implicitly discloses means for associating a priority, i.e. a seriousness degree, to each of the disturbances occurring in the parts of the construction in which a disturbance can be sensed.

The skilled person reading documents D6B and D6C would immediately understand not only that each possible disturbance has a seriousness degree but also that there are disturbances which can prejudice the functioning of the AMS, i.e. the performing of the milking operations (for instance, if a cow is "confined in a box 1"; see alarm 3 as shown in Figure 37 on page 90 of document D6B) and disturbances which do not prejudice it (for instance, if "box 2 gives too much feed", see alarm 1 as shown in Figure 37).

It would be obvious for the skilled person to divide the disturbances which can be sensed into two groups, a first group including disturbances which do not allow the construction to perform the milking operations and a second group including less serious disturbances and thus arrive at a construction in which it is indicated whether the occurred disturbance belongs to first group (serious) or to the second one (not so serious).

Therefore, feature E does not involve an inventive step.

6.5 Having regard to the comments in the above sections 6.3 and 6.4 as well as to the fact that the distinguishing features E and D2 do not mutually support each other in their effects (see the above section 6.2, third sentence), the subject-matter of claim 1 of the patent as granted cannot be considered as involving the inventive step required by Article 56 EPC.

Therefore, the ground for opposition mentioned in Article 100(a) EPC prejudices the maintenance of the patent as granted.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

G. Magouliotis

C. Andries