Datasheet for the decision
of 9 November 2010

Case Number: T 1868/07 - 3.2.04
Application Number: 96935665.8
Publication Number: 0869708
IPC: A01J 5/007
Language of the proceedings: EN

Title of invention:
A method of milking and a milking

Patentee:
DeLaval Holding AB

Opponent:
GEA Farm Technologies GmbH
Maasland N.V.

Headword:
Special mode/DELAVAL

Relevant legal provisions:
EPC Art. 54, 56

Relevant legal provisions (EPC 1973):
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Keyword:
"Novelty for one claimed alternative (no)"
"Inventive step for a further claimed alternative (no)"

Decisions cited:
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Catchword:
-
Case Number: T 1868/07 - 3.2.04

DECISION of the Technical Board of Appeal 3.2.04 of 9 November 2010

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 13 September 2007 revoking European patent No. 0869708 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: M. Ceyte
Members: P. Petti
C. Heath
Summary of Facts and Submissions

I. The opposition division, by its decision dispatched on 13 September 2007, revoked the European patent No. 0 869 708, against which two oppositions had been filed.

II. The proprietor (hereinafter appellant) lodged an appeal against this decision on 8 November 2007 and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 7 January 2007.

III. Oral proceedings before the board were held on 9 November 2010.

IV. The appellant requested that the decision under appeal be set aside and the patent be maintained either on the basis of amended claims 1 to 6 filed as a main request by letter dated 5 October 2010 or on the basis of one of the three auxiliary requests filed with the same letter.

The respondents (opponents I and II) requested that the appeal be dismissed.

V. Claim 1 of the main request reads as follows:

"1. A method of milking animals by the use of at least one milking apparatus comprising teatcups and applying means provided to apply automatically the teatcups to the teats of the animal, said method comprising the following steps:
operating the milking apparatus in a normal mode of operation during a first milking procedure for each animal at a milking occasion, wherein the applying means in said normal mode of operation follows a normal search algorithm for finding the teats and applying the teatcups to the teats,

automatically determining when the milking of a teat of an animal during said first milking procedure does not succeed, wherein the milking does not succeed if the applying means does not find a predetermined number of the teats or does not succeed in applying the teatcups to said predetermined number of the teats,

recording the teat and the animal for which the milking of said first milking procedure did not succeed,

completing the milking of the other teats of the animal in said normal mode during said milking occasion, for which teats milking does succeed, and

automatically operating the milking apparatus in a special mode of operation during a following second milking procedure of said teat after a certain period of time, for which the milking did not succeed in the first milking procedure, wherein said special mode of operation follows a more sophisticated search algorithm than said normal mode, which increases the probability that the applying means finds all the teats of an animal."

Claim 1 of the first auxiliary request differs from claim 1 of the main request by the additional feature
"wherein the special mode of operation takes place at a later milking occasion”.

Claim 1 of the second auxiliary request reads as follows:

"1. A method of milking animals by the use of at least one milking apparatus comprising teatcups and applying means provided to apply automatically the teatcups to the teats of the animal, said method comprising the following steps:

operating the milking apparatus in a normal mode of operation during a first milking procedure for each animal at a milking occasion, wherein the applying means in said normal mode of operation follows a normal search algorithm for finding the teats and applying the teatcups to the teats,

automatically determining when the milking of a teat of an animal during said first milking procedure does not succeed, wherein the milking does not succeed if the applying means does not find a predetermined number of teats or does not succeed in applying the teatcups to said predetermined number of the teats,

recording the teat and the animal for which the milking of said first milking procedure did not succeed,

completing the milking of the teats of the animal in said normal mode during said milking occasion, for which teats milking does succeed, and
automatically operating the milking apparatus in a special mode of operation during a following second milking procedure of said teat after a certain period of time, for which the milking did not succeed in the first milking procedure, wherein the special mode of operation takes place a certain time interval after the milking according to the normal mode, and wherein said special mode of operation follows a more sophisticated search algorithm than said normal mode, which increases the probability that the applying means finds all the teats of an animal."

Claim 1 of the third auxiliary request differs from claim 1 of the second auxiliary request by the additional feature "wherein the special mode of operation takes place at a later milking occasion".

VI. The appellant essentially submitted that the claimed subject-matter was novel and involved an inventive step over document EP-A-191 517 (D1).

The respondents essentially submitted that claim 1 of all requests covered three alternatives, in particular a first alternative according to which it is determined that the milking is successful for all the teats of the animal and a further alternative according to which it is determined that the milking is unsuccessful for all the animal's teats. These two alternatives were clearly derivable from D1 and therefore the claimed subject-matter was not patentable over this prior art document.
Reasons for the Decision

1. The appeal is admissible.

2. The claimed subject-matter

Claim 1 of all requests encompasses three operating alternatives:

i) A first operating alternative, when the animal's milking is successful for all the teats. The milking is only operated in the normal mode and the applying means follows a normal search algorithm for finding the teats and applying the teat cups to the teats of the animal.

ii) A second operating alternative performed when the milking of at least one of the animal's teats but not all of them is unsuccessful. This second alternative comprises the following claimed steps of

- recording the teat(s) and the animal for which the milking in the normal operating mode did not succeed,

- completing the milking of the other teats of the animal in the normal operating mode, for which teats the milking did succeed, and

- automatically operating the milking apparatus in a special mode of operation during a following second milking procedure.
iii) A third operating alternative performed when the milking of all the animal's teats does not succeed. In this case all the steps of the second operating mode are carried out, except the above step of "completing the milking of the other teats ...", because the milking of all the animals teats did not succeed.

Contrary to the appellant's submissions, the three operating alternatives are mutually exclusive. The "claimed" method is restricted to performing one of them, the two others being excluded, depending on whether the animal's milking is successful for all the teats, partially successful or entirely unsuccessful. These three alternatives cannot be combined: if the first operating alternative (normal mode of operation) applies, neither the second nor the third alternative can be performed, because in the normal mode the animal's milking is successful for all the teats.

The Board therefore interprets claim 1 of all requests as an "OR" claim defining three alternatives, either the first (normal mode of operation) or the second or the third operating alternative. Thus if one alternative is not patentable over the cited prior art, the whole claim must fall without it being necessary to consider whether other claimed alternatives could possibly be patentable over the cited prior art.

3. **Novelty and inventive step**

3.1 D1 discloses a milking apparatus comprising a milking cluster with teat cups (29) and applying means provided to apply automatically the teat cups (29) to the teats
of the animal, each teat cup (29) being provided with a sensor (33) which automatically determines whether the applying means does not succeed in applying a teat cup to the respective teat (see particularly Figures 1 and 2; page 13, lines 6 to 9).

The milking machine is provided for performing milking in the "normal mode of operation". If the milking cluster is correctly attached to the teats, then the milking operation is switched on (see claim 2). The normal mode of operation in D1 also follows a normal search algorithm for finding the teats for attaching the teat cups to the teats. It follows that the first operating alternative covered by method claim 1 of all requests lacks novelty in view of D1.

Having regard to the third operating alternative, D1 discloses the steps of

- automatically determining when the milking of all the animal's teats does not succeed, wherein the milking does not succeed if the applying means does not succeed in applying the teat cups to said teats (see particularly page 17, lines 4 to 7),

- recording the result that the attachment of the teat cups to the udder of the animal is not successful, i.e. recording the animal for which the milking does not succeed during said first milking procedure (see particularly page 2, lines 24 to 29),

- after a certain period time automatically operating the apparatus in a special mode of
operation during a following milking procedure of
the animal for which the milking did not succeed,
wherein said "special mode of operation" follows a
more sophisticated search procedure than said
normal mode, which increases the probability that
the applying means finds all the teats of an
animal, said special mode of operation comprising
repetition of said normal search procedure a
predetermined number of times (see particularly
page 13, lines 11 to 16),

- readjusting the milking apparatus at the next
milking occasion, i.e. at a later milking occasion
of the animal, the milking apparatus being
operated in the readjusted mode, i.e. in a special
mode which will follow a more sophisticated search
algorithm than the normal mode and increase the
probability that the applying means finds all the
teats of an animal (see particularly page 2, lines
29 to 32).

3.1.1 In this respect, the appellant essentially submitted
the following arguments:

- D1 does not disclose the features that the special
mode of operation follows a more sophisticated
algorithm than the normal mode. In particular,
since D1 does not make it clear what the
readjustment would imply, the readjustment would
be a permanent readjustment of the milking
apparatus with respect to the animal concerned and
would be used in the following milkings as a part
of the normal mode.
Moreover, D1 does not differentiate between a normal mode of operation and a special mode in so far as it proposes the repetition of the attachment of the teat cups during one and the same milking occasion.

The board does not find these arguments convincing for the following reasons:

- D1 discloses that means are present for readjusting the milking implement on the basis of data recorded by the computer (page 2, lines 24 to 32). As a consequence, on the next milking occasion, the milking apparatus will automatically operate in a mode which is different from the previous normal mode using a normal search algorithm and, thus, can be regarded as a special mode of operation.

- Claim 6 of all requests defines a special mode of operation as comprising a "repetition of the search algorithm a predetermined number of terms". In D1, in case the teat cup attachment fails, one or more trials are made to attach the milking cluster with the teat cups to the udder, and thus the search algorithm is also repeated at least one time.

3.1.2 The respondents submitted that D1 implicitly discloses the step of "recording the teat and the animal for which the milking ... did not succeed", in so far as each of the teat cups of the milking apparatus of D1 is provided with its own sensor for detecting whether the teat cup has been connected correctly to the teat. The
information of a sensor is transmitted to the control unit where it has to be at least temporarily recorded.

The board does not find this argument convincing for the following reasons:

Indeed, each of the teat cups of D1 is provided with a sensor capable of detecting whether the applying means did not succeed in applying the teat cup to a respective teat, each sensor 33 being connected to a control unit 35 by means of a wire 47 (see page 18, lines 26 to 29; Figure 2). However, this does not clearly and unambiguously disclose that the information from each sensor is separately recorded - even temporarily - in the control unit.

3.1.3 Therefore, the third operating alternative defined in claim 1 of all requests, which third alternative is performed when the animal's milking is unsuccessful for all the animal's teats, is novel over D1.

3.2 It is not disputed that D1 represents the closest prior art. Having regard to the considerations above, the third operating alternative defined in claim 1 of all requests, differs from the method of D1 by the step of recording the teats for which the milking did not succeed.

3.2.1 This distinguishing step - in the context of an operating alternative in which it is determined that milking does not succeed for all the teats of the animal - allows the identification of the animals for which milking did not succeed in the normal mode and thus has a functional relationship with the step of
operating the milking apparatus in a special mode at a later milking occasion.

However, in the method of D1 the step of recording that the attachment of the milking cluster did not succeed also permits the animals which were not successfully milked in the normal mode to be identified so that they may be milked in a special mode at a later milking occasion.

Therefore, the problem to be solved may be seen as to provide an alternative solution to the problem of identifying the animal for which milking in the normal mode did not succeed.

Starting from the method of D1, which comprises the use of a milking apparatus comprising teat cups provided with an individual sensor for determining whether the applying means does not succeed in applying the teat cups to the respective teats, it would be obvious for a skilled person - on the basis of his common general knowledge - to modify the known method in such a way that the information of each individual sensor is recorded.

In this respect, it has to be noted that the appellant did not indicate any particular advantage which may be achieved with respect to the closest prior art by the step of individually recording the teats for which the milking did not succeed, in the context of an operating alternative which is performed when the animal's milking does not succeed for all the teats of the animal.
3.3 As the first operating alternative defined in claim 1 of all requests is not novel over prior art document D1 and the third operating alternative also defined in claim 1 is obviously derivable from D1, the subject-matter of claim 1 of all requests is not patentable within the terms of Articles 54 and 56 EPC.

Therefore, the Board concludes that the opposition ground of lack of patentability (Article 100(a) EPC) prejudices maintenance of the patent as amended (main request and auxiliary requests 1 to 3).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Magouliotis M. Ceyte