Datasheet for the decision
of 17 June 2008

Case Number: T 0128/06 - 3.2.04
Application Number: 96202469.1
Publication Number: 0764403
IPC: A01J 5/017

Language of the proceedings: EN

Title of invention:
A method of automatically milking animals and an implement of applying same

Patentee:
MAASLAND N.V.

Opponent:
DeLaval International AB

Headword:
Milking criterion/MAASLAND

Relevant legal provisions:
EPC Art. 54(3)

Relevant legal provisions (EPC 1973):
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
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Catchword:
-
Case Number: T 0128/06 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 17 June 2008

Appellant: DeLaval International AB
(Opponent)
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Respondent: MAASLAND N.V.
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 29 November 2005 rejecting the opposition filed against European patent No. 0764403 pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: M. Ceyte
Members: P. Petti
T. Bokor
Summary of Facts and Submissions

I. The opposition division by its decision dated 29 November 2005 rejected the opposition filed against the European patent No. 0 764 403, whose independent claims 1 and 8 read as follows:

"1. A method of automatically milking animals which are allowed to walk around freely in an accommodation and to go each individually to a milk box including a milking robot and which, prior to possibly being milked, are automatically identified, in which method the moments when an animal has been milked and the quantities of milk supplied thereby by the animal are recorded, said method comprising the step of defining a milking criterion that has to be met in order that this animal, after having presented itself again at the milk box or near thereto, is to be milked again, characterized in that, the milking criterion is defined on the basis of the quantity of milk (M) yielded by means of the milking robot in a fixed period of time (T) and the quantity of milk (m) supplied by one animal in this period of time (T).

8. A construction for automatically milking animals which are allowed to walk around freely in an accommodation and to go each individually to a milk box (7) including a milking robot (8) for being milked there, which construction is provided with an animal identification system and means for establishing the quantity of milk yielded from each animal, characterized in that there is available a computer (10) with means to define, on
the basis of the quantity of milk yielded by means of the milking robot (8) in a fixed period of time and the quantity of milk supplied by one animal in said period of time, a milking criterion that has to be met in order that the animal, after having presented itself again at the milk box (7) or near thereto, is to be milked again."

II. On 27 January 2006 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 April 2006.

III. Oral proceedings before the board were held on 17 June 2008.

IV. The appellant requested that the decision under appeal be set aside and the patent be revoked.

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

VI. The appellant submitted inter alia that the claimed subject-matter lacked novelty over document WO-A-95/26132 (D1) and did not involve an inventive step with respect to document EP-A-639 327 (D2) having also regard to the general technical knowledge of the skilled person.

VII. The respondent contested these arguments. With respect to issue of lack of inventive step, he essentially argued as follows:
(i) The preferential treatment given to animals having a higher average milk production, as referred to in document D2, does not constitute a milking criterion within the meaning of the claimed invention, i.e. a criterion for deciding whether an animal has to be milked.

(ii) The progressive average milk production referred to in document D2 has to be understood as an average over a particular number of milking turns and not over a period of time.

(iii) Document D2 discloses (column 7, lines 46 to 51) that "the animals are classed into groups according to their milk production". Thus, the expression "to give preferential treatment ... to animals having a higher average milk production than other animals" only defines the attribution of a rank to each animal, without defining a comparison between the average milk production of an animal and the average milk production of the herd.

(iv) In the milking system of D2, each time an individual animal is milked on the basis of the progressive average milk production of the animal and that of other animals, the progressive average milk productions of all animals of the herd have to be re-calculated, while according to the claimed invention there is no need to re-calculate each time the progressive average milk productions because the milking criterion is defined on the basis of the total milk yield of the herd.
Reasons for the Decision

Since the European patent was already granted at the time of the entry into force of the EPC 2000 on 13 December 2007, the transitional provisions according to Article 7 of the Act revising the EPC of 29 November 2000 and the Decisions of the Administrative Council of 28 June 2001 and of 7 December 2006, Article 2, have been applied. When Articles or Rules of the version of the EPC 1973 are cited, the year is indicated.

1. The appeal is admissible.

2. **Novelty**

2.1 Document D1, which is an Article 54(3) EPC citation, discloses a method of and a construction for automatically milking animals which are allowed to walk around freely in an accommodation and to go each individually to a milking box including a milking robot and which, prior to possibly being milked, are automatically identified by means of an animal identification system, wherein the moments in which an animal has been milked and the quantity of milk supplied thereby by the animal are recorded in a computer and a milking criterion that has to be met is defined in order that this animal, after having presented itself again at the milk box, is to be milked again. According to D1 (see particularly claim 35) the milking criterion is defined on the basis of the quantity of milk m supplied by an animal and the average milk yield of the animals.
This citation does not refer to the quantity of milk yielded by means of the milking robot in a fixed period of time and thus does not disclose the milking criterion defined in the characterising portion of claims 1 and 8.

Therefore, the subject-matter of claims 1 and 8 is novel over this Article 54(3) EPC document.

3. **Inventive step**

3.1 Document D2 discloses a method of and a construction for automatically milking animals which are allowed to walk around freely in an accommodation and to go each individually to a milking box including a milking robot and which, prior to possibly being milked, are automatically identified by means of an animal identification system. This document is concerned with the general problem of providing criteria for deciding whether an animal presenting itself at the milking box is allowed to be milked (see column 1, lines 9 to 31).

One of the criteria proposed is the milk yield of the animal (see particularly claims 2 and 8; column 2, line 45 to column 3, line 14), wherein "the milk yield of each animal is each time recorded in the memory of the computer system" and there are provided "means to give preferential treatment in admitting animals to the milk box to animals having a higher average milk production than other animals, ..." (column 2, lines 49 to 54). This means that the moments in which each animal has been milked and the quantity of milk supplied thereby by each animal are recorded in a computer as well as that the average milk production of
each animal is determined, wherein in order to decide whether an animal is allowed to be milked the average milk production of the animal is compared with the average milk production of the other animals.

According to this citation, a parameter on the basis of which a milking criterion may be defined is the average quantity of milk supplied by the animal during the preceding day, i.e. during a fixed period of time (see particularly claim 2), and compared with the average. Thus, one of the milking criteria is defined on the basis of the quantity of milk supplied by the animal in a fixed period of time.

3.1.1 The board cannot accept the respondent's interpretation of document D2 (see the above section VII, points (i) to (iii) for the following reasons:

(i) In this citation, the milk production is referred to as "a criterion for animal admission to the milk box" in a sentence in column 2, lines 45 to 49, wherein the subsequent sentence makes it clear that in order to perform this criterion the milk yield of each animal is recorded and "there are provided means to give preferential treatment..." (column 2, lines 49 to 55). Moreover, according to column 3, lines 12 to 15, "the progressive average of the milk yield may be used as a basis for allowing the animal to enter the milk box".

(ii) Document D2 does not disclose that the average milk production is calculated over a predetermined number of milking turns. On the
contrary it refers to "the magnitude of the milk yield of the preceding day" (see column 1, lines 32 to 51; emphasis added) as one of the possible milking criteria as well as to the milking frequency "per period of twenty-four hours" (see column 2, lines 23 to 26 and column 7, lines 35 to 39). On the basis of this information, the skilled reader would immediately understand that in document D2 the average milk production of each animal is calculated over the same period of time, namely over a period of 24 hours.

(iii) The passage in D2 (column 7, lines 46 to 51) referred to by the respondent only refers to the possibility of classing the animals into groups so as to attribute to each group a milking frequency over a period of 24 hours, without indicating how the animals are classed into groups and without referring to any ranking according to the milk production. Due to the term "other animals" (plural form), the skilled reader would immediately understand that the expression "to give preferential treatment ... to animals having a higher average milk production than other animals" implies a comparison between the average milk production of a specific animal presenting itself to the milking box and the average milk production of the whole herd.

3.1.2 Accordingly, it must be assumed that in the milking system known from D2, the milking criterion is defined on the basis of the average milk production of the animal to be milked and the average milk production of the herd.
Therefore, in the milking system of D2, the decision as to whether an animal presenting itself at the milking box is to be milked depends on the quantity of milk supplied by the animal in a fixed period of time in relation to the quantity of milk supplied by all animals together, such that high productive animals are treated better.

3.2 Accordingly, the subject-matter of claim 1 (as well as that of claim 8) differs from the milking system of D2 in that the milking criterion is also defined "on the basis of the quantity of milk (M) yielded by the milking robot".

The technical effect obtained on account of the method according to claim 1 (as well as of the construction according to claim 8) is the same obtained by the milking system of document D2, i.e. to ensure that high productive animals are treated better.

3.3 Starting from document D2, the skilled person has to ask himself how to determine the average milk production of the herd over the fixed period of time. This can be done either by summing the ratios m_i/n between the individual average milk productions m_i and the number of animals N (i.e. \( \sum m_i/N \)) or by dividing the milk yield M of the herd by the number of animals N (i.e. \( M/N \)). The choice of any one of these two possibilities would be obvious since they are mathematically equivalent. The skilled person choosing to use the milk yield M of the herd to calculate the average milk production of the herd would arrive without exercising any inventive skill to a method and
to a construction falling within the terms of claims 1 and 8, respectively, i.e. to a method and a construction in which the milking criterion is defined not only on the basis of the quantity of milk $m$ supplied by an individual animal in a fixed period of time but also on the basis of the quantity of milk $M$ yielded by the milking robot in the same period of time.

3.3.1 In this respect, the respondent essentially submitted that the method and the construction claimed provide the advantage that there is no need to re-calculate, each time an individual animal is milked, the progressive average milk productions of all animals of the herd (see above section VII, point (iv)).

3.3.2 The board cannot accept these arguments for the following reasons:

- Document D2 refers to the progressive average only as a preferably utilizable average.

- It is reasonably conceivable that the milking criterion used during a period of 24 hours is based upon the average milk productions calculated over the preceding 24 hours period, without there being the need of re-calculating each time the average milk productions of all animals. In this respect, it has to be noted that according to claim 2 of D2 the point of time of the milking turn of an animal is determined "in accordance with the magnitude of the milk yield of the preceding day" (emphasis added).
3.4 It follows from the above that the subject-matter of claims 1 and 8 lacks an inventive step as required by Article 56 EPC (1973).

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 M. Ceyte