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**Datasheet for the decision
of 27 June 2012**

Case Number: T 0377/10 - 3.2.04

Application Number: 03076098.7

Publication Number: 1369030

IPC: A01K 1/12, A01J 5/007,
A01J 5/017

Language of the proceedings: EN

Title of invention:
A method and a device for milking animals

Patentee:
Lely Enterprises AB

Opponent:
DeLaval International AB

Headword:
Milking criterion/LELY

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
-

Catchword:
-



Case Number: T 0377/10 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 27 June 2012

Appellant:
(Patent Proprietor)

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Decision under appeal:

Decision of the Opposition Division of the
European Patent Office posted 23 December 2009
revoking European patent No. 1369030 pursuant
to Article 101(3)(b) EPC.

Composition of the Board:

Chairman: A. de Vries
Members: P. Petti
C. Heath

Summary of Facts and Submissions

I. The opposition division, by its decision posted on 23 December 2009, revoked the European patent No. 1 369 030.

It held that the patent failed to meet the requirements of Article 100 (a) EPC in combination with Article 56 EPC, for lack of inventive step, in view of inter alia EP-A- 764 403 (D1), EP-A- 91 892 (D3) and "*Servera dina vänner den bästa maten! - PC-programmet IndivisRAM marknadens mest använda utfodringsprogram*", *Svenskmjölk (Swedish Dairy Association), 1998* (D8), for which an English translation was filed.

II. The patent proprietor (hereinafter appellant) lodged an appeal against this decision on 23 February 2010 and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 3 May 2010.

III. Oral proceedings before the board were held on 27 June 2012.

IV. The appellant requested that the decision under appeal be set aside and that the patent be maintained according to the main request filed with the grounds of appeal or the auxiliary request filed during oral proceedings before the board.

V. The respondent (opponent) requested that the appeal be dismissed.

VI. The wording of claim 1 of the main request reads as follows:

"A method of automatically milking an animal out of a group of animals, which method comprises the following steps:

- the step of establishing a milking criterion including the conditions of a milking-related action and the way in which said milking-related action is performed,

characterized in that the method further comprises:

- the step of establishing a desired cumulative amount of milk or milk component (Q) to be produced by the group of animals from a predetermined first quota-related point of time (T1) to a predetermined future second quota-related point of time (T2),
- the step of determining the cumulative amount of milk or milk component (B1c) produced by the group of animals from an initial point of time (T1), and
- the step of adapting the milking criterion with the aid of the cumulative amount of milk or milk component produced (B1c) and with the aid of the amount desired (6C, Q)".

Claim 1 of the auxiliary request adds to claim 1 of the main request the following final wording:

"wherein the milking criterion is equated to the minimum milking interval".

VII. The appellant submitted inter alia that claim 1 according to the main request and claim 1 according to the auxiliary request involve an inventive step over

document D1 in combination with common general knowledge essentially because the prior art is concerned with increasing the milk production or yield, rather than managing a milking system so as to reduce the milk production if the milk quota threatens to be exceeded.

VIII. The respondent contested the appellant's arguments.

Reasons for the Decision

1. The appeal is admissible.

2. *Admissibility of the auxiliary request*

During oral proceedings the appellant withdrew the previously filed auxiliary requests 1 to 3 and filed a new auxiliary request. The respondent had no objections to the filing of this request.

In view of the fact that the new auxiliary request consists of one claim only which corresponds to claim 1 of the previous auxiliary request 2, the new request is admitted into the proceedings.

3. *Inventive step (main and auxiliary request)*

3.1 Claim 1 of the main request as well as that of the auxiliary request are directed to a method of automatically milking an animal out of a group of animals and encompasses inter alia a method of milking animals in which each animal is allowed to report to a milking station provided with a milking robot which

then automatically milks the animal. A milking criterion is used to decide whether or not an animal reporting to the milking station is to be milked by the milking robot. This milking criterion may be the minimum milking interval as specified in claim 1 of the auxiliary request.

The main idea as expressed in the final step of claim 1 of either request is to adapt the milking criterion, e.g. by either decreasing or increasing the minimum milking interval, so that the annual milk production of the group of animals may come in the vicinity of the desired amount of milk to be produced during the year (the milk quota).

- 3.2 A similar method of automatically milking an animal out of a group of animals is known from D1 (see claims 1 and 2; column 4, lines 5 to 14). This known method establishes as a milking criterion in the sense of claim 1 a minimum milking interval. An animal reporting to the milking robot is milked if this minimum milking interval has elapsed since the previous milking of the animal.

According to this document, the minimum milking interval is determined in dependence on the milk production of the individual animal and can easily be changed during the lactation period so as to either increase or decrease the number of milkings per 24 hours (see column 5, lines 13 to 23).

- 3.3 The method of claim 1 of both main and auxiliary requests differs from D1 in that it comprises

- (a) the step of establishing a desired cumulative amount of milk or milk component to be produced by the group of animals from a predetermined first quota-related point of time to a predetermined second quota-related point of time,
- (b) the step of determining the cumulative amount of milk or milk component produced by the group of animals from an initial point of time, and
- (c) the step of adapting the milking criterion with the aid of the cumulative amount of milk or milk component and with the aid of the amount desired.

There is no mention in D1 of milk quotas or similar or how the production of the group of animals might be monitored and controlled in order to meet a milk quota.

- 3.4 Steps a) and b) represent planning and monitoring phases in the milk production of a group of animals, respectively. Step c) allows for control of the milk production of the group of animals in particular to meet planned production as determined by external factors such as quota regulations (see paragraph [0003] of the patent specification).

Thus, the technical problem to be solved can be seen in providing a method of automatically milking an animal out of a group of animals which makes it possible to better plan and control the production of the group of animals in particular in view of quota regulations. Stated otherwise, the problem is that of how to manage production in an automated milking system subjected to a milk quota. This problem can be deduced from

paragraphs [0003] and [0004] of the patent specification. It is the problem faced by the skilled person, a farmer managing on a daily basis a group of dairy animals to be milked by means of a robotic milking system.

3.5 This dairy farmer will be only too familiar with milk quotas, in particular if he is active in the European Union. It is undisputed that since the late 1970's the then European Community, now Union, under its common agricultural policy (CAP) has been operating a system of quotas, in particular for the dairy industry. Such a milk quota sets a ceiling on the amount of milk that a farmer can produce and sell every year without paying a levy.

3.6 It is inherent in the use of a milk quota system that, firstly, a milk quota for the relevant period be established. In the European Community/Union the national or local authorities administer annual milk quotas to all individual facilities including those with an automatic milking system. Secondly, it requires that actual milk production in a milking facility be monitored with respect to the relevant quota period, so that the farmer and ultimately the authorities can determine whether or not the quota has been met, or exceeded (in which case a penalty would need to be levied). These steps corresponds to steps (a) and (b) and follow immediately from the use of a milk quota system, such as that used under the CAP applied to any milking facilities including those with an automatic milking system. For these reasons, steps (a) and (b) are devoid of inventive merit. This is in fact undisputed by the parties.

Finally, in as far as it is not already inherent in the concept of a quota system, it is immediately obvious that for such a system to work effectively or in a meaningful manner, some means of production control must be provided. Without the ability to influence production in some way, the exercise of setting a quota would be a pointless one. Only then, with some means of adjusting milk production, can it be assured that, if during monitoring of production it is established that there is a risk of exceeding the quota, or falling short of it, corrective measures can be taken to meet the quota. This is in fact what is taught by D8, describing software for managing milk production, see its translation, page 3, top: "make an estimate of your milk production and balance it with the milk quota ... adapt milk production to the quota and be able to make correction in time".

Any known factor that influence milk production can be subsumed under the term "milking criterion" as broadly defined in claim 1 of the main request: it may include "the conditions of a milking related action and the way in which [this action] is performed". These can be inferred from D8, see its translation, page, bottom, which suggests several measures, such as earlier removal of cows, reducing feed intensity during or at the end of lactation, change in home use, and reduction of the feed content, each of which condition actions are related to milking.

Another factor that is well known to effect milk production in particular in an automated milking system such as that of D1 is the milking interval or frequency. Thus, the patent itself at column 6, lines

38 to 43 acknowledges that it is known to increase milk production in a robot milking system in comparison with conventional milking twice a day, by increasing the number of milkings per 24 hours, see also D3, page 1, lines 7 to 16.

3.7 Starting from a method of automatic milking according to D1, the skilled person - confronted with the problem of production management to meet a milk quota - as a matter of obviousness carries out steps (a) and (b) as inherent in a milk quota system such as that used in the European Union under CAP. It is equally obvious to the skilled person that he must control the milk production in some manner to meet the quota. A control factor that is well known to him in this regard is the milking interval and he will without ado consider using this factor to adjust production, either by increasing it so as not to fall short of the quota or by decreasing it if there is a risk of exceeding the quota. This is all the more so as D1 itself already recognizes the value of the milking interval in optimizing milking efficiency. In this way the skilled person would arrive at the subject-matter of claim 1 in the more limited version of the auxiliary request, and thereby also of claim 1 in the broader version of the main request, without exercising any inventive skill.

3.7.1 In this respect, the appellant submitted that claim 1 is concerned with managing the milk production in such a way that the milk production is reduced. e.g. by decreasing the number of milkings, if the milk quota threatens to be exceeded. Since the common general knowledge in the relevant art is concerned with increasing the milk production, the skilled person

would not arrive at the idea of adapting the milking criterion so as to reduce the milk production of the group of animals if the quota threatens to be exceeded.

- 3.7.2 The board considers this argument as being irrelevant for the finding of the present decision: Claim 1 does not specify how the milking criterion, i.e. the minimum milking interval, is adapted, and thus encompasses not only the possibility of reducing the number of milkings (by establishing a longer milking interval) but also that of increasing it (by establishing a shorter interval). The patent specification itself makes it clear that "[b]oth producing less or producing more than a particular planned production may become a very expensive affair" because of quota regulations (column 1, lines 36 to 38).

In any case, although the information concerning common general knowledge as referred to in point 3.4 above explicitly relates to the possibility of increasing the milk production by increasing the number of milking, the skilled person would immediately deduce from this information that the milk production can be reduced by decreasing the number of milkings. Thus, it would also be obvious for the skilled person to adapt the milking criterion with the aid of the determined cumulative amount of milk actually produced and the milk quota so as to establish a longer minimum milking interval if the estimated annual milk production is more than the milk quota.

- 3.8 In the light of the above the board concludes that the subject-matter of claim 1 of main and auxiliary requests lacks an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

A. Counillon

A. de Vries