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**Datasheet for the decision
of 3 June 2008**

Case Number: T 1251/05 - 3.2.04

Application Number: 98917841.3

Publication Number: 0973377

IPC: A01J 5/017

Language of the proceedings: EN

Title of invention:

A milking arrangement and a method of handling a teatcup

Patentee:

DeLaval Holding AB

Opponent:

Octrooibureau Van Der Lely N.V.

Headword:

Support member/DELAVAL

Relevant legal provisions:

EPC Art. 123

Relevant legal provisions (EPC 1973):

EPC Art. 56

Keyword:

"Inventive step (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 1251/05 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 3 June 2008

Appellant: Octrooibureau Van der Lely N.V.
(Opponent) Weverskade 110
NL-3147 Pa Maassluis (NL)

Representative: -

Respondent: DeLaval Holding AB
(Patent Proprietor) P.O. Box 39
SE-147 21 Tumba (SE)

Representative: Berglund, Stefan
Bjerkéns Patentbyrå KB
Östemalmsgatan 58
SE-114 50 Stockholm (SE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
18 August 2005 concerning maintenance of
European patent No. 0973377 in amended form.

Composition of the Board:

Chairman: M. Ceyte
Members: P. Petti
T. Bokor

Summary of Facts and Submissions

I. In its interlocutory decision dated 18 August 2005, the opposition division found that, having regard to the amendments submitted by the patent proprietor, the European patent No. 0 973 377, against which an opposition based upon Article 100(a) EPC had been filed, met the requirements of the European Patent Convention.

The independent claims 1 and 5 held allowable by the opposition division read as follows:

"1. A milking arrangement comprising a milking apparatus, having at least one teatcup (2) to be attached to a teat of an animal to be milked, a teatcup magazine (5), and an automatic handling device with a gripping member and provided separately with respect to the teatcup magazine, wherein the teatcup magazine comprises at least one first member (6, 19) provided to receive said teatcup (2), and a second member (7) provided to support said first member (6, 19), said teatcup (2) having an opening (2a) through which the teat of an animal is introduced during the attachment of said teatcup (2) to the teat, characterized in that said first member (6, 19) is movably connected to said second member (7) between
a first position, in which said teatcup (2) received by said first member (6, 19) has its opening (2a) turned substantially downwards, and
a second position, in which said teatcup (2) received by said first member (6, 19) has its opening (2a) turned in a direction substantially deviating from said downward direction and in which second position the gripping member is provided to grip said teatcup

(2), remove it from the teatcup magazine (5) and 25 attach the teatcup (2) to the teat."

5. A method of handling at least one teatcup of a milking apparatus, said teatcup having an opening through which a teat of an animal to be milked is introduced, comprising the following successive steps of operation:

- holding said teatcup in a first member of a teatcup magazine,
- maintaining the teatcup in said first member in a position in which the opening is turned substantially downwards,
- automatically moving said first member to a position in which the opening of the teatcup is turned in a direction substantially deviating from said downward direction,
- gripping the teatcup,
- removing the teatcup from said first member and the teatcup magazine, and
- attaching the teatcup to a teat of the animal, wherein said gripping step and removing step are performed automatically by means of an automatic handling device provided separately with respect to the teatcup magazine."

II. Opponent I (hereinafter appellant) lodged an appeal against this decision on 22 September 2005 and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 23 December 2005.

III. The following documents played a role in the present proceedings:

D1: EP-A-319 523;

D3: EP-A-300 115;

D5: WO-A-93/0001;

D6: EP-A-213 660;

D7: *"Machine Milking and Lactation"*, edited by A.J. Bramley et al, 1992 Berkshire (England), pages 173 and 386;

D8: *"Melktechnik"*, edited by Top Agrar, 1996 Münster-Hiltrup, pages 4, 96 and 98.

IV. Oral proceedings before the board were held on 3 June 2008.

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

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

VI. The appellant essentially submitted that the skilled person starting from document D3 and taking into consideration documents D5 or D6 or the common technical knowledge reflected by documents D7 or D8 would have arrived at the claimed subject-matter without exercising any inventive skill.

The appellant had also submitted in writing that the claimed subject-matter did not involve any inventive step starting from document D3 and combining it with D1.

The respondent contested these arguments and submitted that the subject-matter of claims 1 and 5 involves an inventive step.

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. *Article 123 EPC*

Amended claims 1 and 5 differ from the corresponding claims 1 and 19 of the patent as granted by addition of features having a basis in claims 14, 18 and 20 of the application as filed. The board is satisfied that these amendments do not contravene the requirements of Article 123(2) and (3) EPC.

3. *Inventive step*

3.1 Document D3, which was considered by the parties as reflecting the closest prior art, discloses a milking arrangement comprising a milking apparatus provided with teat cups (91, 92, 93 and 94) to be attached to the teats of an animal to be milked, a teat cup magazine and an automatic handling device ("Führungssystem" 15) with a gripping member (30) and provided separately with respect to the teat cup

magazine. The teat cup magazine comprises a (first) stationary support member (95) provided to receive said teat cups, each of said teat cups having an opening through which the teat of an animal is introduced during the attachment of the teat cup to the teat. The (first) stationary support member (95) is arranged in such a way that the teat cups received by said support member (95) have their openings turned substantially upwards such that the gripping member can grip a teat cup, remove it from the teat cup magazine and attach it to the teat.

Document D3 also discloses a method of handling at least one teat cup of a milking apparatus, said teat having an opening through which the teat of an animal is introduced, comprising the following method steps:

- holding said teat cup in a support member (15) of a teat cup magazine in a position in which the opening is turned substantially upwards,
- gripping the teat cup, removing the teat cup from the support member,
- attaching the teat cup to a teat of the animal,

wherein said gripping and removing steps are performed automatically by means of an automatic handling device provided separately with respect to the teat cup magazine.

3.1.1 The subject-matter of claim 1 differs from the arrangement of D3 essentially in that

- the (first) support member is movably connected to a second member between a first position, in which

the teat cup received by said first member has its opening turned substantially downwards, and a second position, in which the teat cup has its opening turned in a direction substantially deviating from said downward direction, wherein in this second position the gripping member can grip the teat cup, remove it from the teat cup magazine and attach it to the teat.

The subject-matter of claim 5 differs from the method of D3 essentially by the steps of maintaining the teat cup in said support member in a position in which the opening is turned substantially downwards, and automatically moving said support member to a position in which the opening of the teat cup is turned in a direction substantially deviating from said downward direction.

- 3.1.2 Since the teat cups are maintained with their openings turned downwards, contamination of the teat cups can easily be prevented; additionally, in such a downwardly directed position, the teat cups may be cleaned without difficulty by means of different sorts of cleaning devices and cleaning liquid may easily be discharged from the interior of the teat cups. Moreover, since the teat cups in the second position may have their openings turned substantially upwards, they may be gripped and removed from the teat cup magazine in a position in which they may easily be applied to the teats of the animal by means of the automatic handling device. Consequently, automatic milking may be performed by means of a less complicated automatic handling device in co-operation with the teat cup

magazine (see paragraph [0007] of the patent specification).

Thus, the problem to be solved by the present invention may be seen in providing a milking apparatus provided with teat cups and a method of handling the teat cups of a milking apparatus in which contamination of the teat cups is prevented and an efficient cleaning of the teat cups is allowed, while using a less complicated handling device.

3.2 Document D5 (see particularly Figure 4) discloses a milking apparatus provided with a teat cup magazine and an automatic handling device provided with a gripping member (MA) wherein the teat cup magazine comprises a stationary support member (TF) provided to receive and maintain the teat cups such that their openings are turned substantially downwards.

Document D6 (see particularly Figure 2) discloses a milking apparatus provided with a teat cup magazine and an automatic handling device provided with a gripping member (80) wherein the teat cup magazine comprises a stationary support member (70) provided to receive and maintain the teat cups such that their openings are turned substantially downwards.

It can be derived from documents D7 and D8, which relate to conventional milking machines, that it is common practice to position the teat cup opening downward.

Each of these citations discloses the feature of holding the teat cups with their openings turned

downwards in order to prevent contamination and to allow the cleaning agent to drip out of the teat cups.

However, none of documents D5, D6, D7 or D8 discloses or suggests the teaching upon which the claimed invention is based, that is of providing **a movable support member** for the teat cups, which can be moved from a first position in which their openings are directed downwardly into a second position in which their openings may be directed substantially upwards.

Thus, even if the skilled person were to consider these documents, he would have not been led to the claimed subject-matter.

3.2.1 In this respect the appellant essentially argued as follows:

- i) the skilled person starting from document D3 and looking for a solution to the problem of preventing contamination of the teat cups would find in each of documents D5 to D8 the teaching of holding the teat cups with the openings turned downward,
- ii) when implementing this teaching in the apparatus or in the method known from document D3 the skilled person would inevitably be led to modify the support member of the teat cups in such a way that it is movable between two positions and arrive at the claimed subject-matter in an obvious way.

The board cannot accept this argument because there are alternative solutions allowing to hold the teat cups with the openings turned downwards without using a movable support member. A possible solution could consist for instance in the use of a stationary support member holding the teat cups with their openings turned downwards as shown in document D5 or in D6. It is also conceivable to use a stationary support member by means of which the teat cups can not only be supported in a first position with their openings turned upwards but also held in a second position in which they hang from the stationary support with their openings turned downwards.

- 3.3 Document D1 (see particularly the embodiment according to Figures 8 and 9) discloses a milking arrangement comprising a milking apparatus having an robot arm which permanently supports the teat cups. Each teat cup has an opening through which the teat of an animal is introduced during the attachment of the teat cup to the teat. The robot arm comprises a holder (31) provided to receive said teat cups, the holder (31) being supported by a rod (21) around which the holder can rotate between a first position, in which the teat cups have their openings turned substantially upwards, such that they can easily be attached to the teats of an animal, and a second tilted position the teat cups can be cleaned by a spraying apparatus squirting a detergent into them, wherein in this tilted position detergent squirted into the teat cups can flow out the teat cups again.

Although the holder (31) of document D1 is disclosed as being movable between two positions, it forms a part of

the milking robot, i.e. of the automatic handling device which has many degrees of freedom so as to be moved into different positions for attaching the teat cups to the teats of an animal, and for this reason it cannot be compared with the separate magazine holding the teat cups as disclosed in document D3. Therefore, the skilled person confronted with the problem of preventing contamination of the teat cups of D3 would not have considered document D1 to find a solution applicable to an automatic handling device associated with a separate teat cup magazine.

3.4 Therefore, the subject-matter of claims 1 and 5 involves an inventive step (Article 56 EPC (1973)).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

G. Magouliotis

M. Ceyte