

**Internal distribution code:**

- (A) [ ] Publication in OJ  
(B) [ ] To Chairmen and Members  
(C) [X] To Chairmen  
(D) [ ] No distribution

**Datasheet for the decision  
of 12 October 2010**

**Case Number:** T 0218/09 - 3.2.04

**Application Number:** 01201695.2

**Publication Number:** 1120033

**IPC:** A01J 5/017

**Language of the proceedings:** EN

**Title of invention:**

Construction including an implement for automatically milking animals

**Patentee:**

MAASLAND N.V.

**Opponent:**

DeLaval International AB

**Headword:**

-

**Relevant legal provisions:**

-

**Relevant legal provisions (EPC 1973):**

EPC Art. 100(a)

**Keyword:**

"Inventive step - main and auxiliary requests (no)"

**Decisions cited:**

-

**Catchword:**

-



Case Number: T 0218/09 - 3.2.04

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.04  
of 12 October 2010

**Appellant:** DeLaval Holding AB  
(Opponent) P.O. Box 39  
S-147 21 Tumba (SE)

**Representative:** Gray, Helen Mary  
Albihns.Zacco GmbH  
Bayerstrasse 83  
D-80335 München (DE)

**Respondent:** MAASLAND N.V.  
(Patent Proprietor) Weverskade 110  
NL-3147 PA Maassluis (NL)

**Representative:** Corten, Maurice Jean F.M.  
Octrooibureau Van der Lely N.V.  
Weverskade 110  
NL-3147 PA Maassluis (NL)

**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
25 November 2008 concerning maintenance of  
European patent No. 1120033 in amended form.

**Composition of the Board:**

**Chairman:** M. Ceyte  
**Members:** C. Scheibling  
T. Bokor

## Summary of Facts and Submissions

I. In its interlocutory decision posted 25 November 2008, the Opposition Division found that, taking into consideration the amendments made by the patent proprietor, the European patent and the invention to which it relates met the requirements of the EPC. On 15 January 2009 the Appellant (opponent) filed an appeal and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 3 April 2009.

II. The patent was opposed on the grounds based on Article 100(a) EPC 1973 (novelty and inventive step).

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

D1: EP-A-0 455 305

D2: EP-A-0 112 498

D7: EP-A-0 306 579

IV. Oral proceedings before the Board took place on 12 October 2010.

The Appellant (Opponent) requested that the decision under appeal be set aside and that the patent be revoked.

He mainly argued that the subject-matter of claim 1 of the main request does not involve an inventive step when starting from D1 and taking into consideration the teaching of D2. Moreover the subject-matter of claim 1 of the auxiliary request does not involve the required

inventive step with respect to D7 taken in combination with D2.

The Respondent (Patentee) contested the arguments of the Appellant and submitted that:

The skilled person would not consult D2 for improving the cleaning device of the closest prior art D1.

Moreover, neither D1 nor D2 teach to spray a liquid against the window of a detector, so that the combination of these documents would not lead to a construction having all the features of claim 1 of the main request.

D7 already solves the problem of avoiding contamination of the detector window. Therefore, the skilled person would have no reason to modify the construction disclosed therein. Furthermore, neither D2 nor D7 disclose a cleaning member disposed in connection with the side wall of the milking box. Any combination of D7 with D2 would therefore not lead to a construction having all features of claim 1 of the auxiliary request.

The Respondent requested that the appeal be dismissed, alternatively that the decision under appeal be set aside and the patent be maintained on the basis of the auxiliary request filed with letter dated 10 September 2010.

V. Claim 1 held allowable by the Opposition division reads as follows:

"1. A construction including an implement for automatically milking animals, such as cows, having one or more milking boxes (1) and one or more milking

robots for automatically connecting teat cups to the teats of the animals, whilst the implement includes a detector (10) for determining the position of the teats, said implement further including a cleaning member (36) for cleaning the detector (10) characterized in that the cleaning member (36) includes spraying and blowing means for spraying a cleaning liquid and blowing air against the window of the detector (10)."

Claim 1 of auxiliary request 1 adds with respect to claim 1 of the main request the features of claim 2 as granted, i.e. "... and in that the cleaning member (36) is disposed, in connection with the side walls (5) of the milking box (1), outside the milking box (1)."

### **Reasons for the Decision**

1. The appeal is admissible.
2. *Main request - inventive step*
  - 2.1 It is undisputed that D1 constitutes the closest prior art document and discloses all features of the prior art portion of claim 1.

The construction according to claim 1 differs from that disclosed in D1 in that:

the cleaning member includes spraying and blowing means for spraying a cleaning liquid and blowing air against the window of the detector.

- 2.2 In D1 the cleaning member includes a cover member and a sponge that can be wetted by a cleaning liquid via injector points. The wetted sponge that can wipe over the detector window is likely to accumulate dirt and can also be difficult to clean itself. The problem to be solved with respect to the closest prior art D1 can thus be seen in providing an improved alternative solution for cleaning the detector window (see specification of the patent under appeal, paragraphs [0002] and [0003]).
- 2.3 D2 relates to an arrangement for cleaning windows, especially windows of measurement devices. It does not relate to an arrangement for cleaning the window of a detector located in a milking parlour for determining the position of the teats of a cow to be milked. It is however well established case law for the issue of inventive step to take into consideration not only the state of the art in the specific field of the invention, but also that of neighbouring fields or of a broader general technical field if the same or similar problems arise and if the skilled person could be expected to be aware of such general fields. In the present case D2 relates to cleaning windows especially windows of measurement devices, thus a broader general technical field that the skilled person confronted with the problem of cleaning detectors located in milking parlours is expected to be aware of.
- 2.4 D2 (page 2, lines 1 to 7 and page 7, lines 28 to 33) discloses a detector protected by a window designed for being permanently disposed outside and which for this reason is provided with a cleaning device to remove rain, snow, dirt and industrial pollution from said

window. The cleaning device of D2 (page 7, line 28 to page 8, line 10) consists of a movable hollow arm having a series of holes through which a rinsing liquid and warm pressurised air can be supplied.

- 2.5 In view of this teaching it would have been obvious for a skilled person seeking an improved solution for cleaning the detector window of D1 to provide such detector window with a cleaning member for spraying a cleaning liquid and blowing air against the window.

As regards the alleged difficulty of adapting the arm of D2 to the shape of the window of D1, it is observed that the detector of D1 already has a moving part that sweeps over the window and has liquid supply means 37, 38 integrated in the form of the cover 25. The skilled person wishing to implement the teaching of D2 needs only to adapt the function of this cover to that of the arm of D2, namely to provide cleaning fluid and then pressurised air. Such a modification is well within the competence of a skilled person without the need of inventive activity.

The Respondent further argued that D2 teaches to form a film of liquid, which implies that the arm is so close to the window so that no spraying of the liquid would be possible.

This cannot be accepted; in D2 the arm is located above the window which lies in a horizontal or sloping plane. Hence, liquid that exits the arm will fall onto the window. It would however be immediately apparent to a skilled person that when applying this cleaning method to the vertical window of D1, liquid would need to be supplied with sufficient pressure to enable it to cross

the gap between the arm and the window. In this case the liquid must be sprayed from the arm towards the vertical window.

2.6 Accordingly, the skilled person would take D2 into consideration for solving the problem the invention seeks to solve with respect to D1 and in doing so would arrive in an obvious manner at the construction claimed in the main request. Thus, the subject-matter of claim 1 of the main request does not involve an inventive step and therefore the main request must fail.

3. *Auxiliary request - inventive step*

3.1 For the invention according to the auxiliary request, D7 appears to be the most promising starting point.

3.2 D7 (Figure 1) discloses a construction including an implement for automatically milking animals, such as cows, having one or more milking boxes (11) and one or more milking robots (20, 40) for automatically connecting teat cups (21, 41) to the teats of the animals, whilst the implement includes a detector (110) (Figures 2 and 3) for determining the position of the teats, which is disposed outside the milking box (column 11, lines 46 to 50).

3.3 The construction of claim 1 of the auxiliary request differs from that of D7 in that:  
said implement further includes a cleaning member for cleaning the detector which cleaning member includes spraying and blowing means for spraying a cleaning liquid and blowing air against the window of the detector, the cleaning member being located, in



connection with the side walls of the milking box, outside the milking box.

Although in D7 the detector for determining the position of the teats is disposed outside the milking box in order to minimize the risk of being contaminated by dirt, even if less exposed, this detector can nevertheless be contaminated and thus needs to be cleaned since the presence of dirt would be detrimental to the accuracy with which the position of the teats is determined.

3.4 Starting from D7 as closest prior art, the problem to be solved by the invention according to the auxiliary request could be seen in improving the reliability of operation of the detectors by removing contamination.

3.5 For the reasons already explained with respect to the main request the skilled person seeking to solve this problem would take the teaching of D2 into consideration and thus provide the detector of D7 with a hollow arm having a series of holes through which a cleaning liquid and warm pressurised air can be supplied for cleaning the window (claim 1 does not exclude that the cleaning member is mounted on the detector).

Since the window to be cleaned in D7 lies in an essentially vertical plane, as already stated the liquid needs to be supplied with sufficient pressure to enable it to cross the gap between the arm and the window and contact the window, i.e. it has to be sprayed against the vertical window.

3.6 The Respondent argued that even if the skilled person had envisaged combining D7 with the teaching of D2 he would not have arrived at a construction where the cleaning member is disposed, in connection with the side wall of the milking box, outside the milking box.

However, since in D7 the detector is permanently located outside the milking box, the cleaning member is necessarily located outside the milking box.

Furthermore, the expression "in connection with the side wall of the milking box" can possibly be interpreted as meaning that the cleaning member is disposed outside the milking box with respect to the side wall of the milking box.

But even if this expression should be interpreted as meaning that the cleaning member is at least indirectly fixed with respect to the side wall of the milking box, such a disposition would also result from the combination of D7 and D2.

As a matter of fact, in D7 (see Figures 1 and 3) the milking implement comprises side posts which support an intermediate floor (14) on which the animals walk in and out of the milking box and on which the side walls (16, 17) of the milking box (formed by railings) are positioned.

The detector (camera 110) is fixed on the intermediate floor 14 of the milking box (column 11, lines 46 to 50).

Consequently, since the cleaning member is according to the teaching of D2 associated with the detector, the cleaning member would also be disposed, in connection with the side wall of the milking box, outside the milking box.

3.7 Accordingly, the subject-matter of claim 1 of the auxiliary request does not involve an inventive step either and therefore, the auxiliary request must fail too.

## **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:

V. Commare

M. Ceyte