DECISION
of 20 September 2005

Case Number: T 0673/03 - 3.2.04
Application Number: 93200105.0
Publication Number: 0551958
IPC: A01J 7/00
Language of the proceedings: EN

Title of invention:
An implement for milking animals

Patentee:
MAASLAND N.V.

Opponent:
Alfa Laval Agri AB

Headword:
-

Relevant legal provisions:
EPC Art. 100a

Keyword:
"Inventive step (yes)"

Decisions cited:
T 0616/01

Catchword:
-
Case Number: T 0673/03 - 3.2.04

**DECISION**

of the Technical Board of Appeal 3.2.04

of 20 September 2005

**Appellant:** Alfa Laval Agri AB
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**Representative:** Smulders, Theodorus A.H.J.
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**Respondent:** MAASLAND N.V.
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**Representative:** Corten, Maurice Jean F.M.
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**Decision under appeal:** Decision of the Opposition Division of the European Patent Office posted 10 April 2003
rejecting the opposition filed against European patent No. 0551958 pursuant to Article 102(2) EPC.

**Composition of the Board:**
Chairman: M. Ceyte
Members: C. Scheibling
T. Bokor
Summary of Facts and Submissions

I. By its decision dated 10 April 2003 the Opposition Division rejected the opposition. On 20 June 2003 the Appellant (opponent) filed an appeal and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 19 August 2003.

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

D1: EP-A-0 300 582

D5: DE-A-21 20 020

D8: US-A-3 938 470

III. Opposition was filed on the grounds based on Article 100a) EPC (lack of novelty and inventive step).

In an earlier decision T 616/01 dated 22 July 2002 the Board of Appeal found that claim 1 was novel with respect to D1 and remitted the case to the Opposition Division for further prosecution.

IV. Oral proceedings before the Board took place on 20 September 2005.

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

He mainly argued as follows: The feature of claim 1 according to which the chamber is a separate chamber does not contribute to solve the problem of the
invention and is therefore to be disregarded when assessing inventive step. From D1, it is known to have the milk hoses extending at least partially through the robot arm. Thus, starting from D1 it would be obvious for a skilled person faced with the problem of avoiding that the milk hoses contact the ground to simply have them extending through the robot arm substantially over its length. Moreover, D5 and D8 disclose milk hoses which are either located inside a cavity of the carrier arm or suspended under it over its entire length. Therefore, a skilled person would be prompted to the claimed solution, which consequently does not involve an inventive step.

The Respondent (patentee) countered the Appellant's arguments and mainly argued as follows:

The fact that, according to claim 1 as granted, the carrier member of the milking robot connects each of the four teat cups to a respective teat of an animal at different locations, implies that the milk hoses must be able to move or slide with respect to each other and with respect to the chamber in which they are located. This is rendered possible in that the chamber is "separate" from other "chambers" of the carrier member. Therefore, the feature "separate chamber" is necessary to obtain the intended effect and thus, contributes to solve the problem of the invention.

In D1, the parts of the milk hoses extending inside the robot arm are passed through holders, which grip the hoses. Therefore, said hoses cannot move inside the robot arm. This implies that the length of the milk hoses not extending through the robot arm necessarily
comprises a slack portion. Accordingly, a skilled person would not contemplate supporting the milk hoses inside the robot arm substantially over its length in order to avoid this slack (and thus any contact with the ground), because the robot arm construction of D1 does not allow movement of the milk hoses inside the robot arm, which consequently would no longer be able to connect the teat cups to the teats.

Furthermore, a skilled person would not take D5 into consideration because this citation does not solve the problem underlying the present invention, neither discloses a robot arm nor a chamber, let alone a separate chamber. D8 teaches to solve the posed problem by providing hangers to support the milk hoses. If a skilled person were to contemplate applying the teaching of D8 to D1, then he would provide the robot arm of D1 with hangers supporting the milk hoses and thus, not arrive at the claimed solution. Therefore, the subject-matter of claim 1 as granted involves an inventive step.

The Respondent requested that the appeal be dismissed.

V. Claim 1 as granted reads as follows:

"1. An implement for automatically milking an animal, comprising a milking robot (5) with a carrier member (33) adapted to carry four teat cups (6) which are automatically connectable to the teats of an animal, characterized in that the carrier member (33) comprises a separate chamber (39) inside which substantially over the length of the carrier member (33) milk hoses (21) connected to said teat cups (6) are mounted."
Reasons for the Decision

1. The appeal is admissible.

2. Inventive step:

2.1 The implement according claim 1 as granted differs from that disclosed in D1 in that:

- the chamber is a separate chamber

- the milk hoses are mounted in said chamber substantially over the length of the carrier member.

2.2 The problem underlying the patent in suit which results from the drawbacks observed in D1 can be seen in avoiding contact between the milk hoses and the ground in an implement for automatically milking an animal, comprising a milking robot with a carrier member adapted to carry four teat cups which are automatically connectable to the teats of an animal (see patent specification, column 1, lines 3 to 6 and 16 to 20).

The Board is satisfied that said problem is solved by the distinguishing features of claim 1.

2.3 According to the wording of claim 1 the implement comprises a "milking robot (5) with a carrier member (33) adapted to carry four teat cups (6) which are automatically connectable to the teats of an animal".
Since the teats of an animal are located at different Cartesian co-ordinates in the X, Y and Z directions, once the teat cups are connected to the teats, the lengths of the parts of the milk hoses extending beyond the carrier member are different. This implies that the milk hoses must be able to move or slide with respect to each other and with respect to the carrier member. This is accomplished in the claimed invention by the provision of a separate chamber. Therefore, the feature that "the chamber is a separate chamber" contributes to the solution of the problem (see section 2.2 above) and thus has to be taken into consideration when assessing inventive step.

2.4 In D1, the part of the milk hoses extending inside the robot arm are passed through holders, which grip the milk hoses, which therefore, cannot move with respect to robot arm (see column 16, lines 2 to 5; Figure 7).

Accordingly, in D1 the part of the milk hoses extending beyond the robot arm must necessarily comprise a slack portion (see also D1, column 6, lines 48 to 51).

2.5 The Appellant submitted that it would be obvious for a skilled person faced with the problem of avoiding contact between the milk hoses and the ground, to arrange them inside the robot arm substantially over its length, all the more the milk hoses extend already partially through said robot arm (D1, column 6, lines 45 to 48).

The Board does not agree with this point of view. A skilled person is aware that according to D1 the milk hoses disposed inside the robot arm are gripped by
holders (see column 16, lines 2 to 4), leaving them no freedom of movement. Thus, by suppressing the hanging down (slack) portion of the milk hoses and locating them inside the robot arm substantially over the length of said arm, any freedom of movement of the hoses would likewise be suppressed. It would thus no longer be possible to connect the teat cups at different locations.

Therefore, a skilled person would not contemplate supporting the milk hoses inside the robot arm substantially over its length.

2.6 D5 (page 6, lines 10 to 13) refers to a retraction device which prevents the milking claw and the teat cups from coming into contact with the ground once the teat cups have been removed from the teats. D5 does not consider the problem of avoiding contact between the milk hoses and the ground when moving the milking claw into position beneath the animal. Moreover as clearly shown in Figure 1 the part of the milk hose extending beyond the carrier member comprises a slack portion which clearly hangs down from it. Therefore, the implement according to D5 exhibits the drawback the patent in suit seeks to overcome; consequently D5 cannot lead a skilled person towards the claimed solution.

Furthermore, D5 does not disclose a milking robot arm, but an inverted U-shaped carrier beam which does not form a chamber, let alone a separate chamber.

2.7 D8 addresses the problem of the patent in suit, but teaches to provide hangers to support the milk hoses.
Thus, if a skilled person were to contemplate applying the teaching of D8 to a robot arm according to D1, this would necessarily result in providing the robot arm of D1 with hangers supporting the milk hoses and thus, lead to a solution which does not foresee arranging the milk hoses in a separate chamber which allows a freedom of movement for the milk hoses.

Therefore, the teaching of D8 cannot lead a skilled person to the solution claimed in the patent in suit.

2.8 The Appellant argued that D5 and D8 teach a skilled person to support the milk hoses substantially over the length of the carrier member.

Although the milk hoses might be supported over the length of the carrier member according to Figure 2 of D5 or Figure 1 of D8, such a feature may not be construed in isolation from the remainder of the document.

However, from the whole of the document, the aim and thus the teaching of D5 is directed to how to reduce manpower during milking, especially when removing the milking claw and teat cups from an animal after it has been milked. In D5 this is achieved by using a carrier member and a retraction device for the milking claw and teat cups. By the same token, D8 teaches to avoid that the milk hoses contact the ground by supporting said hoses with hangers on a carrier member.
Trying to construe the Figures of D5 or D8 out of the context of the whole document amounts to an ex post facto analysis and thus, cannot be accepted by the Board.

2.9 Therefore, the subject-matter of claim 1 as granted involves an inventive step with respect to the considered prior art.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

V. Commare M. Ceyte