Datasheet for the decision of 2 December 2010

Case Number: T 0312/09 - 3.2.04
Application Number: 01201941.0
Publication Number: 1129616
IPC: A01K 1/12
Language of the proceedings: EN

Title of invention: Automated milking parlor

Patentee: Bou-Matic Technologies Corporation

Opponent: GEA WestfaliaSurge GmbH

Headword: -

Relevant legal provisions: -

Relevant legal provisions (EPC 1973): EPC Art. 100a)

Keyword: "Main request - novelty (yes) - inventive step (yes)"

Decisions cited: T 0219/87, T 0414/98

Catchword: -
Case Number: T 0312/09 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 2 December 2010

Appellant: GEA WestfaliaSurge GmbH
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Respondent: Bou-Matic Technologies Corporation
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Decision under appeal:
Interlocutory decision of the Opposition
Division of the European Patent Office posted
3 December 2008 concerning maintenance of the
European patent No. 1129616 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 3 December 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. The Appellant (opponent) filed an appeal on 30 January 2009. The appeal fee was paid on 2 February 2009. The statement setting out the grounds of appeal was received on 7 April 2009.

II. The patent was opposed on the grounds based on Article 100(a) and (c) EPC. The ground under Article 100 c) EPC was not substantiated during opposition proceedings.

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

D10: WO-A-95/22247 (state of the art under Article 54(3) EPC)
D17: brochure "Für Große Herden: Melkstände mit hohem Durchsatzleistungen" from "Westfalia Separator" dated March 1993

IV. Oral proceedings before the Board took place on 2 December 2010.

The Appellant (Opponent) requested that the decision under appeal be set aside and the patent be revoked.
He mainly argued that the subject-matter of claim 1 of the main request was not novel with respect to D3, D10 or D17 and that even if the claimed invention was found to be novel with respect to D3, it would not involve an inventive step when taking into consideration the common knowledge of the skilled person.

The objections under Article 100(b) EPC and Article 123(2) EPC raised against amended claim 1 of the main request were withdrawn during the oral proceedings before the Board.

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

In the implement according to D3 each cow is engaged and positioned by one single semi-circular projection. The gate disclosed in D10 is not of the rotating reel type. D17 discloses a gate comprising an elongate brisket beam provided with projections. However these projections are not wedge-shaped. Thus, none of these citations discloses all the features of claim 1 of the main request.

Starting from D3 as closest prior art, the skilled person would have no incentive to modify the positioning device such that each cow is engaged and positioned by and between two adjacent wedge-shaped projections. Since D17 does not disclose wedge-shaped projections at all, the combination of D3 and D17 cannot lead to the invention according to claim 1 either.

The Respondent (Patentee) requested that the decision under appeal be set aside and that the patent be maintained on the basis of the main request filed during the oral proceedings before the Board,
alternatively on the basis of the auxiliary request filed with letter dated 7 August 2009.

V. The claims of the main request read as follows:

Claim 1
"1. An elongate rotating reel type gate (22) for use as a restraining means in a milking parlor, said gate (22) having at least one elongate brisket beam (24) along which animals to be milked are aligned, said gate (22) being further provided with a positioning device to engage and position a cow, characterized in that the positioning device comprises a plurality of substantially wedge-shaped projections (26) spaced along and extending and pointing outwardly and upwardly from the brisket beam (24) when in its operative position in which it restrains the animals during milking and spaced such that the cow is engaged and positioned by and between adjacent wedge-shaped projections (26)."

Claim 4
"4. A milking parlor including a gate as claimed in any one of claims 1 to 3 mounted on a framework."

Claim 10
"10. A method for automating a milking parlor as claimed in any one of claims 4 to 9 said milking parlor further including an entry gate through which cows are introduced one each into a plurality of stalls into the milking parlor and milking units for conducting the milking operation, wherein said elongated rotatable gate positions cows in a milking stall and urges the
cows to exit the stall after milking, said method
comprising:
detecting the completion of the milking operation,
initiating the exiting process of the rotating gate
upon detecting the completion of the milking operation,
detecting the rotation of the rotating gate,
opening the entry gate upon detecting a predetermined
amount of rotation of the rotating gate,
detecting the number of cows passing through the entry
gate,
closing the entry gate upon detecting a predetermined
number of cows passing through the entry gate,
detecting the closing of the entry gate and
initiating the positioning process of the rotating gate
upon detecting the closing of the entry gate".

Reasons for the Decision

1. The appeal is admissible.

2. Amendments - main request

In claim 1 the limiting features are introduced that
the gate is of the "rotating reel type" and that the
cow is engaged and positioned "by and" between adjacent
wedge-shaped projections.
The basis for these limiting features can be found on
page 3, lines 26 and 27, page 1, line 31 to page 2,
line 2 and page 3, line 32 to page 4, line 4.
The Board is satisfied that the requirements of
Article 123(2) EPC are met.
3. Novelty - main request

3.1 Novelty of claim 1 of the main request has been disputed with respect to D3, D10 and D17.

3.2 With respect to D3

3.2.1 D3 (Column 2, lines 15 to 25 and 55 to 60; Figures 1 and 4) discloses an elongate rotating reel type gate (20) for use as a restraining means in a milking parlor (10), said gate (20) having two elongate brisket beams (22) along one of which animals to be milked are aligned, said gate (20) being further provided with a positioning device to engage and position a cow. The positioning device comprises a plurality of substantially semi-circular projections spaced along and extending and pointing outwardly and upwardly from the brisket beam (22) when in its operative position in which it restrains the animals during milking.

3.2.2 However the projections are neither wedge-shaped nor spaced such that the cow is engaged and positioned by and between adjacent projections.

3.2.3 The Appellant argued that the projections shown in D3 are almost wedge-shaped and fulfil the same function as in the patent under appeal. Furthermore, in Figure 1 of D3 the gate is not in the operative position in which the animals are milked. To reach the operative position the gate is slightly rotated counter-clockwise so that the animal moves back and sideways. In that operative position each cow is placed between two adjacent projections.
3.2.4 However the semi-circular projections on the elongate rail are positioned such that the brisket of the cow is engaged and a specific cow is restrained between a single semi-circular projection at the front end and the corresponding bend of the rump rail 16 at the rear end. One single cow comes into contact with only one semi-circular projection. The adjacent semi-circular projections to the left and to the right are assigned to the neighbouring cows. It follows that the semi-circular projections are not spaced "such that the cow is engaged and positioned by and between adjacent wedge shaped projections" as claimed in claim 1.

3.3 With respect to D10 (state of the art under Article 54(3) EPC)

In D10 (page 2, lines 24 to 27; Figures 5 and 7) the milking parlor comprises a gate which can be lifted and rotated between a lower position where it restrains the cows and an upper position where it clears the passageway. This gate is however not of the rotating reel type, i.e. of the kind comprising a brisket beam fixed on levers and mounted for rotation on an axis parallel to and offset from the longitudinal axis of the brisket beam.

3.4 With respect to D17

D17 (pages 2 and 3) discloses a milking parlour with an elongate rotating reel type gate, having two elongate brisket beams which are provided with projections. However, the projections extend in a plane that is perpendicular to the brisket beam. They are neither wedge-shaped nor spaced such that each cow is engaged
and positioned by and between adjacent wedge-shaped projections.

3.5 Consequently, novelty of the subject-matter of claim 1 of the main request is given with respect of D3, D10 or D17.

4. Inventive step - main request

4.1 D3 is undisputedly the closest prior art document.

The subject-matter of claim 1 differs from the elongate rotating reel type gate of D3 in that
- the projections are wedge-shaped and
- are spaced such that a cow is engaged and positioned by and between adjacent projections.

These distinguishing features have the effect that "when brisket beam 24 is rotated to position cows 20, the wedge shaped upwardly angled loop 28 engages the cow on her shoulder and encourages the cow to move toward the center of milking stall 16. The wedge shape and the upward inclination of positioning device 26 helps position and center cows of various sizes" (see two last sentences of paragraph [0014] of the patent specification).

4.2 The problem the invention seeks to solve with respect to D3 as closest prior art can be seen in improving the positioning of animals of various sizes so that they can easily be milked.
The Appellant contended that the skilled person would arrive at the claimed solution on the basis of its common general knowledge. However, as already explained, from Figure 1 of D3 it is apparent that the animals are positioned in front of the projections. Therefore, even if assuming that an animal would move sideways when gate is rotated counter-clockwise into its operative position and thus, be positioned between two successive projections, it would only come into contact with the projection which was in front of it but not with the next adjacent projection which is assigned to the neighbouring cow. Consequently a single cow would not be engaged and positioned by two adjacent projections and there is no reason why the skilled person should modify the positioning arrangement of D3 where a specific cow is restrained between a single semi-circular projection at the front end and the corresponding bend of the rump rail at the rear end.

The skilled person would not have envisaged modifying the arrangement of D3 in such a way that a single cow is engaged and positioned by and between adjacent wedge shaped projections in absence of any promptings in the prior art or obvious advantages to be achieved. In this respect it is noted that the point is not whether the skilled person could have arrived at the invention by modifying the prior art, but rather whether, in expectation of the advantages actually achieved he would have done so because of promptings in the prior art (T 219/87, section 7.4; T 414/98, section 6.1) which is presently not the case.
The Appellant has submitted in writing that combining D3 with D17 could lead the skilled person to the claimed invention. However as already explained D17 does neither disclose wedge-shaped projections nor exhibit projections spaced such that the cow is engaged and positioned by adjacent projections. Therefore, the combination of the teachings of D3 and D17 would still lack the characterising features of claim 1 of the main request.

Accordingly, the subject-matter of claim 1 of the main request involves an inventive step.

4.4 The aspects referred to with respect to the inventive step of the elongate rotating reel type gate of claim 1 apply in turn also to the milking parlour of claim 4 including a gate as defined in claim 1 and to the method of claim 10 for automating a milking parlour as claimed in claim 4 including also a gate as defined in claim 1. The subject-matter of claims 4 and 10 therefore also involves an inventive step.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent as amended in the following version:

   Description
   Columns 1 and 2 as filed during the oral proceedings before the Board
   Columns 3 and 4 of the patent specification

   Claims
   1 as filed during the oral proceedings before the Board
   2 to 10 as held allowable by the opposition division

   Figures
   1 to 15 of the patent specification

The registrar: The Chairman:

V. Commare M. Ceyte