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D E C I S I O N
of 25 October 2002

Case Number: T 0186/01 - 3.2.4

Application Number: 93201062.2

Publication Number: 0566200

IPC: A01J 7/00

Language of the proceedings: EN

Title of invention:
A construction for automatically milking animals, such as cows

Patentee:
MAASLAND N.V.

Opponent:
DeLaval International AB

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 100(a), 111(1), 123

Keyword:
"Novelty - main request (no); novelty - first auxiliary request (no)"
"Novelty - second auxiliary request (yes)"
"Inventive step - second auxiliary request (yes)"

Decisions cited:
T 0314/99

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0186/01 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 25 October 2002

Appellant: (Opponent)
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Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted 6 December 2000 rejecting the opposition filed against European patent No. 0 566 200 pursuant to Article 102(2) EPC.**

Composition of the Board:

Chairman: C. A. J. Andries
Members: C. D. A. Scheibling
H. Preglau

Summary of Facts and Submissions

I. By its decision dated 6 December 2000 the Opposition Division rejected the opposition. On 7 February 2001 the appellant (opponent) filed an appeal and paid the appeal fee simultaneously. The statement setting out the grounds of appeal was received on 12 April 2001.

II The patent was opposed on the grounds based on Articles 100(a) (54 and 56) and 100(b) EPC.

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

D3: EP-A-0 300 582.

D9: Schillingmann, "Versuchsanlage zum automatischen Melken - Konzeption und Ergebnisse", VDI/MEG Kolloquium Landtechnik, Heft 9, "Robotereinsatz in der Landwirdschaft am Beispiel des Melkens", Tagung Braunschweig-Völkenrode, 5./6. December 1990, pages 70 to 91.

D10: Bundesforschungsanstalt für Landwirtschaft, Braunschweig-Völkenrode; interner Arbeitsbericht 1990, Nr. 200/1991, Artmann R. und Schillingmann D., "Entwicklung eines rechnergestützten automatischen Haltungssystems für Milchvieh", pages 65 to 77.

D10a: Letter from Mr Artmann to Mrs Gray dated 3 April 2001.

D10b: Letter from Mr Artmann to Mrs Gray dated 24 October 2002.

D11: Schillingmann and Artmann, "Alternativen zur Handhabung der Melkbecher", VDI/MEG Kolloquium Landtechnik, Heft 9, "Robotereinsatz in der Landwirdschaft am Beispiel des Melkens", Tagung Braunschweig-Völkenrode, 5./6. December 1990, pages 111 to 126.

IV. Oral proceedings took place on 25 October 2002. During these oral proceedings the appellant withdrew the ground for opposition based on Article 100(b) EPC.

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

The respondent (patentee) requested that the appeal be dismissed and that the patent be maintained as granted or that the patent be maintained according to a first, second or third auxiliary request filed during the oral proceedings.

The respondent also requested that the case be remitted to the first instance, should the documents D9, D10, D10a and D11 be introduced into the proceedings.

VI. Independent claim 1 as granted reads:

"1. A construction for automatically milking animals, such as cows, comprising a milking parlour with a milking robot, the milking robot having a robot arm able to carry teat cups with connected thereto milk tubes, characterized in that the milk tubes are protectively and slidably accommodated in a holder in such a way that they each form at least part of a circular loop, which loops are located in the holder in

an upwardly extending plane".

Independent claim 1 according to the first auxiliary request reads:

"1. A construction for automatically milking animals, such as cows, comprising a milking parlour with a milking robot, the milking robot having a robot arm able to carry teat cups with connected thereto milk tubes, characterized in that the milk tubes are protectively and slidably accommodated in a holder in such a way that they each form at least part of a circular loop, which loops are located in the holder in an upwardly extending plane, a guideway being provided for a milk tube near the bottom side in the holder".

Independent claim 1 according to the second auxiliary request reads:

"1. A construction for automatically milking animals, such as cows, comprising a milking parlour with a milking robot, the milking robot having a robot arm able to carry teat cups with connected thereto milk tubes, characterized in that the milk tubes are protectively and slidably accommodated in a box-like holder comprised in the robot arm in such a way that they each form at least part of a circular loop, which loops are located in the holder in an upwardly extending plane".

Reasons for the Decision

1. The appeal is admissible.

2. *Amendments - compliance with Article 123 EPC*

First auxiliary request

Claim 1 of the first auxiliary request comprises in addition to the features of claim 1 as granted, the features of claim 11 as granted (which corresponds to claim 29 as originally filed). Claim 11 (respectively claim 29) referred back to any one of the preceding claims, thus, providing a basis for the direct combination of claims 1 and 11.

By adding the features of claim 11 to the features of claim 1 as granted, the scope of claim 1 of the first auxiliary request has been limited and thus, the protection conferred is not extended.

Therefore, the requirements of Article 123(2) and (3) EPC are met. This point was not disputed by the appellant.

Second auxiliary request

Claim 1 of the second auxiliary request comprises in addition to the features of claim 1 as granted, the feature "a box-like holder comprised in the robot arm". This feature is disclosed on page 8, lines 34, 35 of the description as originally filed (patent specification, column 2, lines 15, 16).

The appellant argued that the relevant passage of the description reads "The robot arm 40 comprises a box-like holder 41 containing milk tubes 42 and pulsation tubes 43" and, that consequently, "and pulsation tubes" should also have been added to the wording of claim 1.

However, the Board is of the opinion that there is no functional or structural relationship between the fact that the holder is "box-like" and the fact that it contains also "pulsation tubes" in addition to the "milk tubes" and, that therefore, the amendment made does not contravene the requirements of Article 123(2) EPC.

Since said additional feature further limits the protection conferred by the claim, the amendment is also acceptable with respect to the requirements of Article 123(3) EPC.

3. *Interpretation of the independent claims 1*

3.1 In the view of the respondent (patentee) the expression "the milking robot having a robot arm able to carry teat cups" is to be interpreted as meaning that the robot arm can carry at least one teat cup at a time.

3.2 The expression "the milk tubes are protectively and slidably accommodated in a holder" should be interpreted as meaning that the milk tubes are located inside the holder and are protected by the walls of the holder from being damaged (see patent specification, column 1, lines 9 to 16; description as filed, page 1, lines 5 to 11). Furthermore, it is clear from the teaching of the patent in suit that "slidably" simply means that the milk tubes can be moved in a guided,

supported manner in and out of the holder. Indeed the term "slidably" also covers the use of guideways 58 to 60 as shown in Figures 2 to 4.

3.3 According to the interpretation of the respondent (patentee), as well in claim 1 as granted as in claim 1 of the first auxiliary request, the holder can be located anywhere in the construction.

Since said claims give no indication as to the relation between the holder and the robot arm, the Board sees no reason why it should depart from the interpretation proposed by the respondent (patentee).

3.4 The expression "that they (milk tubes) each form at least part of a circular loop" has to be interpreted in the light of the patent specification, column 5, lines 17 to 33 (description as originally filed, page 13, lines 6 to 21), where it is stated that "the milk tubes 42 ... are wound into or out of the holder 41 ... The loops ... render it possible for the tubes to slide in the longitudinal direction of the holder 41 and at the same time provide that the tubes can be relatively long and can still be accommodated in the holder 41" and Figure 1 on the one hand, and on the other hand in the light of the definition of a loop as for example given by the Collins English Dictionary (1979) (see appellant's notice of opposition, filed with letter of 21 October 1998, page 2, beginning of the second paragraph) according to which a loop is any round or oval shaped thing that is closed or nearly closed.

Thus, it is clear that not any bent tube automatically forms a loop in the meaning of the patent. To form a

loop in the meaning of the patent, both extremities of the loop should at least mainly extend in a same direction, which in this case is the direction of movement of the tube, i.e. both extremities should extend closer to the direction of movement of the tube than to a direction perpendicular to said direction of movement in order to render it possible to accommodate in said holder the over length of tube necessary to allow the "in" and "out" movement of said milk tubes.

4. *Documents D9, D10, D11 and remittal to the first instance*

D9: In the light of the interpretations given by the respondent (patentee), D9 becomes the most relevant prior art document. Thus, being highly relevant D9 is introduced into the proceedings.

Remittal of a case results in a substantial delay of the procedure and involves additional costs for all parties and the EPO. Remittal due to a new document should therefore be exceptional. In the present case, because the respondent has had sufficient opportunity to study D9 and because the relevance of D9 is linked to the interpretation of claim 1 as granted given by the respondent(patentee) during the oral proceedings (see above sections 3.1 and 3.3), which interpretation was contrary to its own interpretation brought forward in the appeal proceedings up to the start of the oral proceedings, the Board refrains from remitting the case back to the first instance (which would leave open the possibility for further different interpretations) and decides to exercise the power

within the competence of the Opposition Division according to the provisions of Article 111(1) EPC.

D11: Since there is no doubt about the availability of this document to the public before the priority date of the patent in suit, D11 is also introduced into the proceedings.

D10: Although the appellant filed two letters (D10a and D10b from Mr. Artmann) in support of the assertion that D10 was available to the public before the priority date of the patent in suit, the Board considers that, although the possibility cannot be excluded, availability to the public has not been proved beyond any doubt. This is because the letters provided, although indicating that D10 was available in the library, do not indicate from which date onwards D10 was available in said library. The fact that it is said in D10b that documents generally are available within four weeks is too general and does not allow any specific conclusion on what effectively happened to document D10. Furthermore, the accessibility to the library for the public is not proven. D10 did not by its mere arrival in the archive become publicly available, since that did not mean that it was as of that point in time catalogued or otherwise prepared for the public to acquire knowledge of it, and because without such means of information the public would remain unaware of its existence. However, the possibility that the public could acquire knowledge or awareness of the existence of D6 is a precondition of its public availability before the priority date of the patent in suit (see T 314/99, sections 5.1 to

5.6). Furthermore, to have access to the library a member of the public had first to ask for permission and there is no proof that such a permission is always given for all available information.

Finally the cover page of D10 bears inscriptions according to which the said report is unpublished and can only be handed over or published even partially if an authorisation is given by the Institute, suggesting once more that an authorisation can be refused.

For the Board too many questions concerning the availability to the public of document D10 remained unanswered, so that the Board comes to the conclusion that it has not been sufficiently proven that document D10 was available to the public before the priority date of the patent in suit.

Therefore, D10 is not part of the state of the art according to Article 54(2) EPC and is not introduced into the proceedings.

5. *Novelty - main request*

5.1 The parties agreed that D9 discloses the features of the prior art portion of claim 1 as granted. The Board agrees. Furthermore, D9 (see page 75, Figure 5) discloses that the milk tubes are protectively (in a space delimited by walls and located below the milk box) and slidably (due to the action of the vacuum cylinder and the robot arm the tubes can be moved into and out of that space) accommodated in a holder (space) in such a way that they each form at least part of a circular loop (since wound around a pulley), which

loops are located in the holder in an upwardly extending plane.

5.2 The respondent argued that in D9 the tubes are not slidably accommodated. In the view of the Board, the tubes in D9 can be moved into and out of the holder and are guided and supported by the pulley. Thus, according to the interpretation given in section 3.2, above, said tubes are "slidably accommodated".

The respondent argued further that some loops are located outside the holder. However, it is clear from the description of the patent in suit, column 5, lines 28 to 33 that the loops should "render it possible for the tubes to slide" (see also section 3.4, above). This means that the loops which have to be located in the holder, are those loops which form the part of a circular loop providing for the length that is necessary to move the tubes into and out of the holder. Thus, the loop of D9 to be considered when comparing the construction of D9 with the construction according to claim 1 as granted is the loop wound around the pulley of the vacuum cylinder (D9, Figure 5) and located inside the space below the milk box in exclusion of any other loop and there is no doubt that said loop is located in the holder (space). Furthermore, if the holder could be located anywhere in the construction, as stated by the respondent (see above section 3.3) then of course a configuration analogous to Figure 5 of D10 can exist in the patent in suit, where the loops leaving the holder still have to be connected (unprotected) to the teats, and are therefore in the terms of the respondent also located outside the holder. Based on the respondent's own interpretation, there can therefore be no difference in

this respect.

The respondent finally argued that in D9 the tubes do not form a loop because of the sharp bend around the pulley. However, neither claim 1 as granted nor the patent description fix any limit to a bend in terms of dimensions in order to form a loop. Only a functional definition is given in the description of the patent, column 5, lines 17 to 33. Said definition led to the interpretation given in section 3.4 above. According to this interpretation by being wound around the pulley the tube disclosed in D9 forms at least part of a circular loop in the sense of the patent in suit.

5.3 In this respect, the Board wants to emphasize that the generality of the terms used in the claim in suit allows a large interpretation and that the patentee cannot benefit from a lack of precise information, i.e. that the patentee is this specific case cannot relate to an indefinite term to distinguish the claimed-subject-matter from the state of the art.

5.4 Thus the subject-matter of claim 1 of the main request is not novel and consequently the main request is not allowable.

6. *Novelty - first auxiliary request*

6.1 Claim 1 of the first auxiliary request differs from claim 1 as granted by the addition of the following feature "a guideway being provided for a milk tube near the bottom side in the holder".

6.2 The respondent argued that D9 does not disclose a guideway in the sense of the patent in suit.

6.3 In the patent in suit, the said guideway is defined by the rollers 58, see patent description, column 3, lines 11 to 19 and Figure 1. Thus the Board considers that in the meaning of the patent in suit a guideway is a constructional feature located in the holder for guiding the milk tubes, i.e. a constructional feature avoiding any random movement of the said tubes.

However, in the view of the Board the pulley of D9 also provides guidance and support to the milk tube and the vacuum cylinder takes up the slack in the tube (otherwise the tube would slide off the pulley) and thus, any random movement of the tube is prevented. Consequently, said pulley forms a guideway in the meaning of the patent in suit. Furthermore, said pulley is located in the holder, near the bottom side.

6.4 Consequently, the subject-matter of claim 1 of the first auxiliary request is not novel either and thus, the first auxiliary request is not allowable.

7. *Novelty - second auxiliary request*

None of the cited documents discloses in combination all the features of claim 1 of the second auxiliary request. This point was not disputed by the appellant.

Novelty of the subject-matter of claim 1 of the second auxiliary request is given.

8. *Closest prior art document - second auxiliary request*

The Board, in agreement with the appellant, considers D3 to be the closest prior art document.

From D3 (claim 1; Figures 1, 5 to 9) there is known a construction for automatically milking animals, such as cows, comprising a milking parlour with a milking robot, the milking robot having a robot arm able to carry teat cups with connected thereto milk tubes, wherein part of the milk tubes are protectively and slidably accommodated in a box-like holder comprised in the robot arm.

9. *Inventive step - second auxiliary request*

9.1 The construction according to claim 1 of the second auxiliary request differs from that known from D3 in that:

the tubes are accommodated in such a way that they each form at least part of a circular loop, which loops are located in the holder in an upwardly extending plane.

9.2 The problem to be solved is to decrease the possibility of damage to the milk tubes during the milking process.

9.3 This is achieved, according to the patent in suit, by accommodating the necessary over length of the milk tubes in form of partly circular loops inside the holder.

9.4 The appellant mainly referred to Figure 7 of D3. Figure 7 illustrates two portions of a milk tube 101. The two portions are vertically displaced from one another. The appellant argued that, as a consequence, the milk tube must bend downwardly at some point of its length and thus must form a part of a circular loop.

However, neither Figure 7 nor the description give any

information about the shape of the portion which links the two represented portions of the milk tube. In this respect, the Board wishes to emphasise that a lack of information in a document cannot result in a skilled person being presented with a clear and unequivocal teaching.

Furthermore, the portion of the tube linking the two portions of the milk tube shown in Figure 7 must, to some extend, be positioned not only between hollow part 61 and part 62, but also partly beneath part 62. Thus, D3 does not disclose a (one) holder but two holders and the "bent portion" of the tubes is therefore not accommodated in the holder but in-between the two holders.

Finally, the not represented "bent portion" of the tube cannot form a loop in the meaning of the patent in suit according to the interpretation given in section 3.4 above, since it cannot have both extremities mainly extending in the same direction of movement of the tubes. Furthermore, there is no indication in D3 that the "bent portion" can provide for the slack necessary to render it possible for the tubes to slide in the longitudinal direction of the holder, i.e. to allow the movement of the tubes into an out of the holder.

Consequently, the features of claim 1 of the second auxiliary request according to which "the tubes are accommodated in such a way that they each form at least part of a circular loop, which loops are located in the holder" is not disclosed or suggested by D3.

Furthermore, the Board is not convinced that the portion of the tubes which is not represented could be

arranged in an upwardly extending plane. Although the appellant argued that it would be obvious for a skilled person to arrange said portions of tubes between the holders 61 and 62 and underneath holder 62 (see D3, Figure 7) in order to protect them from the legs of the animal to be milked, the argument forwarded by the respondent with reference to Figure 6, that there would be no space to arrange the said portions of tubes in another than a nearly horizontal plane, i.e. between holders 61 and 62 and on each lateral side of holder 62, could not be convincingly traversed by the appellant.

9.5 Consequently, the subject-matter of claim 1 of the second auxiliary request is not obvious to a person skilled in the art, having regard to D3.

Since no further documents were cited alone or in combination against claim 1 of the second auxiliary request with respect to inventive step, the Board concludes that the subject-matter of claim 1 of the second auxiliary request involves an inventive step.

10. *Third auxiliary request*

Since claim 1 of the second auxiliary request is found to satisfy the requirements of patentability, there is no need to examine the third auxiliary request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

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

Claims: No. 1 of the second auxiliary request filed during oral proceedings,
Nos. 2 to 24 as granted.

Description: columns 1 and 2 as filed during oral proceedings,
columns 3 to 5 as granted.

Drawings: Figures 1 to 4 as granted.

The Registrar: The Chairman:

G. Magouliotis C. Andries