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**Datasheet for the decision
of 13 November 2007**

Case Number: T 1591/05 - 3.2.04

Application Number: 98964642.7

Publication Number: 1039797

IPC: A01J 5/017

Language of the proceedings: EN

Title of invention:

An animal related apparatus

Patentee:

DeLaval Holding AB

Opponent:

Octrooibureau Van der Lely N.V.

Headword:

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Relevant legal provisions:

-

Relevant legal provisions (EPC 1973):

EPC Art. 100(a), 114(2)

Keyword:

"Main request and auxiliary requests I to III and VI, novelty (yes), inventive step (no)"

Decisions cited:

T 1002/92

Catchword:

-



Case Number: T 1591/05 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 13 November 2007

Appellant: Octrooibureau Van der Lely N.V.
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Representative: Corten, Maurice Jean F.M.
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Representative: Howard, Paul Nicholas
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
17 November 2005 concerning maintenance of
European patent No. 1039797 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 17 November 2005, the Opposition Division found that, taking into consideration the amendments according to the first auxiliary request made by the patent proprietor during opposition proceedings, the European patent and the invention to which it relates met the requirements of the EPC.

On 22 December 2005 Appellant I (patentee) filed an appeal and paid the appeal fee simultaneously.

On 16 January 2006 Appellant II (opponent) filed an appeal and paid the appeal fee simultaneously.

The statement setting out the grounds of appeal were respectively received on 24 March 2006 (Appellant II) and 27 March 2006 (Appellant I).

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

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

D1: EP-A-0 360 354

D2: US-A-5 083 284

D3: WO-A-96/36212

D5: "Efficient Milking"; pages 42 and 45; 1995

D6: "Back to the future"; pages 44 and 45; 1986

IV. Claim 1 of the main request (as granted) reads as follows:

"1. An animal related apparatus, comprising a robot (6) for performing an animal related operation, said robot being associated with a control means (23), and at least one animal related device (12a, 12b) associated with said control means, said robot being provided with a robot arm (8) adapted to move said animal related device towards an animal, characterised in that a registering means (20a, 20b, ..., 20g) is provided for registering a cumulative running value, said control means being adapted to generate a signal when a predetermined threshold value has been reached; and wherein said predetermined threshold value is set for each of said at least one animal related device, said robot and a complete animal related operation."

With letter dated 15 October 2007 Appellant I filed auxiliary requests I to VII.

Claim 1 of the first auxiliary request differs from claim 1 as granted in that "for each of said at least one animal related device, said robot and a complete animal related operation" has been added after "for registering a cumulative running value" in the characterising part of the claim.

Claim 1 of the second auxiliary request reads as follows:

"1. An animal related apparatus, comprising a robot (6) for performing an animal related operation, said robot being associated with a control means (23), and at least one animal related device (12a, 12b)

associated with said control means, said robot being provided with a robot arm (8) adapted to move said animal related device towards an animal, characterised in that
a registering means (20a, 20b, ... , 20g) is provided for registering a cumulative running value,
said control means being adapted to generate a signal when a predetermined threshold value has been reached;
and wherein a respective
said predetermined threshold value is set for each of said at least one animal related device, said robot and a complete animal related operation."

Claim 1 of the third auxiliary request reads as follows:

"1. An animal related apparatus, comprising a robot (6) for performing an animal related operation, said robot being associated with a control means (23), and more than one animal related device (12a, 12b) associated with said control means, said robot being provided with a robot arm (8) adapted to move a said animal related device towards an animal, characterised in that
a registering means (20a, 20b, ... , 20g) is provided for registering a cumulative running value of more than said one animal related device;
said control means being adapted to generate a signal when a predetermined threshold value has been reached;
and wherein
said predetermined threshold value is set for each of said more than one animal related device, said robot and a complete animal related operation."

Claim 1 according to the sixth auxiliary request comprises in addition to the features of claim 1 as granted the features of claim 9 as granted.

V. Oral proceedings before the Board took place on 13 November 2007.

Appellant I (patentee) requested that the decision under appeal be set aside, that the patent be maintained as granted (main request), alternatively on the basis of one of the first to third or sixth auxiliary requests filed with letter dated 15 October 2007.

The fourth, fifth and seventh Auxiliary requests were withdrawn during the oral proceedings.

He mainly argued as follows:

None of the late filed documents D7 to D14 should be admitted into the proceedings since they are not highly relevant on a prima facie basis.

D1 does not disclose registering means for each of the animal related device, the robot and the complete animal related operation. Thus novelty is given.

D1 does not refer to the maintenance of an animal related apparatus. D2 relates to monitoring cables wear in industrial robots. There is however no incentive for a skilled person to combine the teaching of D2 with that of D1. Furthermore, the introduction of three separate kinds of maintenance concerning at least one animal related device, the robot and a

complete animal related operation is neither known from nor suggested by any of the cited prior art documents.

Claim 1 of the first auxiliary request makes clear that a running value has to be registered for each of the at least one animal related device, the robot and a complete animal related operation. Claim 1 of the second auxiliary request specifies that a respective threshold is set for each of these entities. Claim 1 of the third auxiliary request specifies that more than one device is to be monitored. Since none of the cited prior art documents suggests monitoring more than one running value, the subject-matter of claim 1 of these requests involves an inventive step.

Claim 1 of the sixth auxiliary request specifies that the running value of a teat cleaning device is registered. None of the cited documents discloses or suggests monitoring this specific device for the purpose of triggering its maintenance.

Appellant II (opponent) countered the arguments of Appellant I and mainly argued as follows:

D1 discloses not only all the features of the prior art portion of claim 1 as granted but also registering means for registering a cumulative value of the number of searching movements of the animal's teats, and control means to generate a signal if a threshold value is reached. Since the searching procedure which is a complete animal related operation involves laser means which is an animal related device and a robot, the running value is registered and the predetermined threshold is set for each of said entities.

Accordingly, the subject-matter of claim 1 as granted is not novel.

Even if considering that claim 1 would imply registering a separate running value for each of the three entities, the subject-matter of claim 1 as granted would not involve an inventive step with respect of D1 in combination with D2 when taking into consideration the common general knowledge as illustrated by D5, which teaches to separately monitor a number of operations and a running time for maintenance purposes.

Since the basic solution of the maintenance problem is solved in D2 by registering a cumulative running value of the device to be monitored, it is obvious for a skilled person that where several devices or complete machine parts are to be monitored, a separate cumulative running value is to be registered for each entity and compared to a respective threshold.

Therefore, the additional features of claims 1 of the first to third auxiliary requests do not make any inventive contribution to the claimed apparatus. Claim 1 of the sixth auxiliary request specifies which animal related device (teat cleaning device) is to be monitored. Since a teat cleaning device may need maintenance, simply specifying the type of device to be monitored cannot provide any inventive contribution.

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

Reasons for the Decision

1. The appeals are admissible.
2. *Admissibility of the late filed documents D7 to D14*

In proceedings before the Boards new facts and evidence which go beyond the facts and evidence presented in the notice of opposition should only be admitted into the proceedings if prima facie there are good reasons to suspect that such late-filed material would prejudice the maintenance of the European patent (see decision T 1002/92, OJ EPO 1995, 605).

In the present case the newly submitted documents do not prima facie appear to be more relevant than the documents already on file and are therefore disregarded pursuant to Article 114(2) EPC.

3. *Interpretation of claim 1 as granted*
 - 3.1 Claim 1 comprises the following statement: "a registering means (20a, 20b, ... , 20g) is provided for registering a cumulative running value, and wherein said control means being adapted to generate a signal when a predetermined threshold value has been reached; and said predetermined threshold value is set for each of said at least one animal related device, said robot and a complete animal related operation."
 - 3.2 Although claim 1 refers to "a cumulative running value" which is to be compared to "a predetermined

threshold value", which in turn is set for "each of said at least one animal related device, said robot and a complete animal related operation", it cannot be inferred from claim 1, whether or not a different threshold value is set for the device, the robot and the complete operation.

- 3.3 However, during a specific "complete operation" an animal related device and the robot may be actuated or not or even be actuated more than once. Thus, even if the set threshold value is the same, at a given point of time, the cumulative running value for a specific animal related device might be different from that for the robot and from that for the complete animal related operation. Since the threshold value is set for each of the device, the robot and the complete operation, the cumulative running value of each entity has to be compared in turn with the predetermined threshold value. Consequently, the cumulative running value of each of said entities has to be registered independently.

This implies that claim 1 has to be interpreted in the sense that a registering means is provided for registering a separate cumulative running value for each of said at least one animal related device, said robot and a complete animal related operation.

4. *Main request*

4.1 Novelty:

Novelty has been disputed with respect of D1.

D1 discloses an implement for milking an animal (claim 1, Figures 1 and 2) comprising a robot for performing an animal related (milking) operation, said robot being associated with a control means (76, 78, 80), and at least one animal related device (teat cups and coupling means 45 to 48 and 50) associated with said control means, said robot being provided with a robot arm (6) adapted to move said coupling means and teat cups towards an animal for automatically coupling the teat cups to the teats of the animal's udder. When after a number of searching movements still no teats have been identified, an alarm is operated (column 15, lines 27 to 29).

This implies that the implement according to D1 comprises registering means for registering the cumulative number of trials, and control means adapted to generate a signal when a predetermined threshold value has been reached.

However, according to the interpretation given above, claim 1 additionally requires that a separate cumulative running value is registered for each of said at least one animal related device, said robot and a complete animal related operation.

D1 does not disclose such a possibility, and accordingly novelty of the subject-matter of claim 1 of the main request is given.

4.2 Inventive step:

As indicated in the description of the patent in suit (column 1, lines 15 to 21) a drawback of milking robots as known from D1 is the need for regular

maintenance. Thus the object of the claimed invention is to provide an improved apparatus, which needs less maintenance.

The claimed invention is in essence based in the idea of setting a threshold value for a registered cumulative running value and generating a signal for triggering maintenance of the animal related apparatus when the threshold value is reached.

However, this idea is already known from D5 which shows that the maintenance of a teat cup liner should be triggered when either the number of operations or the running time exceeds a preset threshold.

This idea was also known in the field of industrial robots:

D2 (column 1, lines 19 to 26 and 46 to 52; column 5, line 21 to column 6, line 30) discloses an apparatus for predicting the lifetime of cables in the movable parts of an industrial robot comprising means for storing predetermined degrees of the amount of bending of the cables for movable portions, arithmetic means for reading out the degree which corresponds to the position of the arm whenever the arm stops and adding the degrees, and means for comparing the results of additions obtained and predetermined reference values to determine that the cables are close to exceeding their lifetime if the result of the addition exceeds the predetermined reference values and to generate an alarm.

Thus D2 solves the problem of triggering maintenance of an industrial robot by replacing the cables of a robot only when the cables are close to exceeding their lifetime. Although not disclosing registering means, the triggering of maintenance when the number of milkings or the running time exceeds predetermined thresholds is also taught by D5.

It would therefore have been natural for a skilled person to apply the teaching of D2 concerning an industrial robot to the milking robot known from D1.

Moreover, it is clear that the other component parts of an apparatus as disclosed in D1 may need maintenance to keep them in working order. Thus, the problem remaining the same, a person skilled in the art would be incited to apply the same solution, i.e. he would trigger maintenance of other component parts or entities of the apparatus by providing further registering means to monitor these entities too.

Appellant I argued that the invention lies in the introduction of three distinct kind of maintenance concerning at least one animal related device, the robot and a complete animal related operation. This means that the maintenance of one animal related device cannot be the same as the maintenance of a complete animal related operation.

However, claim 1 does not exclude that a complete animal related operation could be performed by a single animal related device. For example a teat cleaning operation which is a complete animal related

operation can be carried out by a single animal related device, that is the teat cleaning device.

On the other hand, claim 5 as granted relates to an animal related device (milking equipment) provided with a teat cup having an intermediate space connected to a source of vacuum via a pulsator and thus comprising more than one single device.

Moreover, the patent in suit solely indicates that at least one animal related device, the robot and a complete animal related operation are monitored for maintenance purposes. No inventive step can be seen in simply monitoring each of these three entities, i.e. no combinatory or special effect can be derived from the fact that these entities are separately monitored. The Proprietor has failed to show that the monitoring of one animal related device for maintenance purposes has any influence on the monitoring of the robot or of a complete animal related operation performed by further animal related devices.

Accordingly, the subject-matter of claim 1 of the main request does not involve an inventive step.

5. *First to third auxiliary request*

5.1 Amendments:

With respect to claim 1 as granted:

Claim 1 of the first auxiliary request further specifies that a running value is registered for each

of said at least one animal related device, said robot and a complete animal related operation.

Claim 1 of the second auxiliary request further specifies that "a respective said predetermined threshold value is set for each of..."

Claim 1 of the third auxiliary request further specifies that there is more than one animal related device.

5.2 Inventive step:

As stated in section 3.3 above, the fact that a running value has to be registered for each entity is already implicit from claim 1 as granted.

The description of the patent in suit indicates that the cumulative running values may be the running time of a cylinder, the number of pulsations of a pulsator, the running time of the driving means of brushes or of the image capturing device, the duration of a complete operation comprising cleaning and subsequent milking of an animal. Therefore, it is obvious for a skilled person that a different threshold must be set for distinct cumulative running values if these relate to different entities and parameters.

Accordingly, the addition of "respective" to indicate that there is set a distinct threshold for each cumulative running value does not provide any inventive contribution for the reasons already stated with respect to the main request.

It is further common knowledge that a milking implement provided with a milking robot comprises more than one animal related device.

Thus, since it has been found with respect to claim 1 as granted, that monitoring three different entities (device, robot, complete operation) does not involve an inventive step, the fact that there are also more than one device to be monitored cannot alter this finding.

Accordingly, the subject-matter of claim 1 of the first to third auxiliary requests does not involve an inventive step either.

6. *Sixth auxiliary request*

With respect to claim 1 as granted, claim 1 of the sixth auxiliary request specifies additionally that the running value of the animal related operation to be registered is the running time of the teat cleaning device.

Thus, claim 1 of this auxiliary request specifies which animal related device is monitored in order to improve its maintenance. However, since it is self evident that all animal related devices of a milking implement may require maintenance (see for example D5), and since it has been found with respect to claim 1 as granted that monitoring at least one animal related device does not involve an inventive step, specifying which specific but known animal related device is to be monitored for the purpose of triggering its maintenance, does not involve any inventive skill

either, absent any indications of an unexpected technical effect or a prejudice against monitoring this specific animal related device.

Accordingly, the subject-matter of claim 1 of the sixth auxiliary request does not involve an inventive step.

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:

G. Magouliotis

M. Ceyte