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Datasheet for the decision of 19 March 2007

Case Number: T 0350/05 - 3.2.04

Application Number: 98950512.8

Publication Number: 1022937

IPC: A01J 5/013

Language of the proceedings: EN

Title of invention:
Intelligent claw

Patentee:
N.V. Nederlansche Apparatenfabriek NEDAP

Opponent:
DeLaval International AB

Headword:
Knowable results/NEDAP

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0350/05 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 19 March 2007

Appellant: (Patent Proprietor)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 30 December 2004 revoking European patent No. 1022937 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: M. Ceyte
Members: P. Petti
T. Bokor

Summary of Facts and Submissions

I. An opposition based upon Article 100 (a) EPC was filed against the European patent No. 1 022 937. The opposition division revoked the patent by decision posted 30 December 2005.

II. The patent proprietor (hereinafter appellant) lodged an appeal against this decision on 8 March 2005 and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 26 April 2005.

III. Oral proceedings before the board were held on 19 March 2007.

IV. The appellant requested that the decision under appeal be set aside and the patent be maintained as granted (main request) or, auxiliarily, on the basis of an amended claim 1 according to one of the auxiliary requests 1 to 4 filed with the statement setting out the grounds of appeal.

The opponent (hereinafter respondent) requested that the appeal be dismissed.

V. Claim 1 as granted (main request) reads as follows:

"1. A device for analyzing milk in order to determine the health of milk animals and/or the quality and composition of the milk obtained from these animals, comprising a milking circuit which forms part of a milking machine and is connected to the milking cups adapted for connection to the teats of the animals, in which milking circuit sensors (6,10) are disposed

within a housing to determine parameters relevant to the health of the animals and/or the quality and composition of the milk, which device further comprises data processing means (9) adapted to process signals determining these parameters and provided by the sensors (6,10) and to make knowable the processing results thereof, **characterized** in that the data processing means (9) are arranged in or on the same housing as in which or on which the sensors (6,10) themselves are arranged."

Claim 1 of the first auxiliary request differs from claim 1 as granted by addition of the following features:

"wherein in or on the housing of the sensors (6,10) and the data processing means (9) there are also arranged transmitting means for transmitting the resulting data to receiving means installed elsewhere or wherein an output cable is provided for reporting the results of the data processing outwardly."

Claim 1 of the second auxiliary request differs from claim 1 as granted by addition of the following features:

"wherein in or on the housing of the sensors (6,10) and the data processing means (9) there are also arranged transmitting means for transmitting the resulting data to receiving means installed elsewhere or wherein an output cable is provided extending outwardly from the housing for reporting the results of the data processing outwardly."

Claim 1 of the third auxiliary request differs from claim 1 as granted by addition of the following features:

"wherein in or on the housing of the sensors (6,10) and the data processing means (9) there are also arranged transmitting means for wirelessly transmitting the resulting data to receiving means installed elsewhere or wherein an output cable is provided for reporting the results of the data processing outwardly."

Claim 1 of the fourth auxiliary request differs from claim 1 as granted by addition of the following features:

"wherein in or on the housing of the sensors (6,10) and the data processing means (9) there are also arranged transmitting means for wirelessly transmitting the resulting data to receiving means installed elsewhere or wherein an output cable is provided extending outwardly from the housing for reporting the results of the data processing outwardly."

VI. The appellant essentially argued that the subject-matter of claim 1 of the main request as well as that of each auxiliary request were novel and involved an inventive step with respect to document US-A-5 664 521 (D3). This was contested by the respondent.

Reasons for the Decision

1. The appeal is admissible.

2. *Main request (novelty and inventive step)*

2.1 Document D3 discloses in relation to Figures 1 and 2 a first embodiment of a device for analyzing milk in order to determine the health of milk animals and/or the quality of the milk obtained from these animals, comprising a milking circuit which forms part of a milking machine and is connected to the milking cups adapted for connection to the teats of the animals, in which milking circuit four conductivity sensors (transducers 114 to 117) are disposed on a housing (118) to determine parameters relevant to the health of the animals (mastitis) and/or the quality of the milk. This device further comprises data processing means (see column 4, lines 14 to 17: "processor (not shown)") adapted to process signals determining these parameters and provided by the sensors. According to column 4, lines 17 and 18, the data processing means "may be incorporated in the housing 118 ...", i.e. in the housing on which the sensors themselves are arranged.

The data processing means processes the signals from each sensor to produce output signals (i.e. processing results) which are used to operate diverter valves (128) to divert milk flow away from the main path leading to a milk storage to a subsidiary path leading to a drain or to a dump bucket.

D3 is silent as to the display of the processing results of the data processing means.

2.2 Thus, the subject-matter of claim 1 differs from this embodiment of D3 in that the data processing means are

adapted "to make knowable the processing results thereof".

2.2.1 Therefore, the subject-matter of claim 1 is novel over the first embodiment of D3.

2.3 This embodiment does not require relatively long lines extending from the sensors to the data processing means, outside of the sensor housing. Thus, this prior art device is assumed to solve the technical problem as indicated in paragraphs [0004] and [0005] of the patent specification in so far as the signal lines from the sensors to the data processing means are not susceptible to damage due to the presence of the animals.

Thus, starting from this first embodiment of D3, the technical problem to be solved by the present invention may be seen in providing the farmer with information concerning the health of the animals and/or the quality of the milk.

Data processing systems, such as processors, are normally associated with display screens and/or printers. Moreover, in the specific field of milking, this basic knowledge is reflected for instance by US-A-3 841 756 (hereinafter D9), which discloses (see particularly Figures 1 and 6) a device for analyzing the milk production at a milking station with an analyzing unit (26) comprising a housing in which sensors are arranged, which transmits via an output cable information from the sensors to a master unit (36) connected to a printer.

Therefore, the skilled person dealing with the problem of providing the farmer with information concerning the health of the animals and/or the quality of the milk would - without exercising any inventive skill - associate the data processing means of D3 with a display screen and/or a printer to make knowable the processing results. In doing so he would arrive at the subject-matter of claim 1.

2.3.1 In this respect, the appellant essentially argued as follows:

(a) Document D3, in column 4, lines 18 to 25, refers to a second embodiment in which the data processing means is arranged at a central station remote from the sensor housing, the central station including indicators providing a visual indication of the processing results of the data processing means. Thus, starting from the first embodiment of D3, the skilled person dealing with the problem of providing the farmer with information would solve it by arranging not only the display screen and/or the printer but also the processor outside of the housing on which the sensors are arranged and, thus, would not arrive at the subject-matter of claim 1.

(b) The milk analyzing unit (26) of D9 is not a data processing means within the meaning of claim 1, in so far as the signals from the sensor are processed in the master unit (36) which is arranged remotely from the milk analyzing unit. Therefore, D9 does not suggest that a data processing means which is arranged in the sensor housing can be adapted to make knowable its processing results.

(c) The subject-matter of claim 1 differs from the prior art known from D3 also in that the sensors are disposed **within** the housing in which the data processing means is arranged.

The board cannot accept these arguments for the following reasons:

(a') It is true that D3 discloses in relation with Figures 1 and 2 a second embodiment in which the data processing means may be at a central station remote from the sensor housing. However, the first embodiment, in which the processor is arranged in the sensor housing, comes closer to the claimed invention than the second embodiment. Starting from this closest prior art, the skilled person confronted with the above mentioned problem of providing the farmer with information concerning the health of the animals and/or the quality of the milk, in the case of a processor arranged in the sensor housing, would not take into consideration the second embodiment in which the processor is arranged at a central station remote from the sensor housing. As has already been stated, the skilled person knows that processors are usually associated with display screens and/or printers. It will be therefore readily apparent for the skilled person to make knowable the processing results of the processor arranged in the sensor housing by displaying them for example on a display screen.

(b') The argument under (b) is irrelevant, because document D9 merely reflects the general knowledge of the skilled person. In any case, the skilled reader will immediately derive the teaching that information concerning the health of the animals and/or the quality of the milk is made knowable in so far as it is transmitted from a first unit (namely, the milk analyzing unit), which is installed in close proximity of a milking location, to a second unit (namely, the master unit connected to the printer), which is remote from the first unit.

(c') Claim 1 defines the sensors as being arranged either in or **on the housing**. It is observed that the provision of a plurality of sensors arranged in a housing not only is acknowledged to be known in the patent specification (column 1, lines 32 to 34), but is also known from D9 which discloses a plurality of sensors arranged in a common housing.

2.3.2 Therefore, the ground for opposition according to Article 100(a) EPC prejudices the maintenance of the patent on the basis of the main request because the subject-matter of claim 1 as granted does not involve an inventive step (Article 56 EPC).

3. *Auxiliary requests (inventive step)*

3.1 Each independent claim of auxiliary requests 1 to 4 claims two alternatives, a first one in which there is provided transmitting means in or on the sensor housing for transmitting the resulting data to receiving means

installed elsewhere and a second one in which an output cable is provided for reporting the results of the data processing outwardly.

3.2 Having regard to the second alternative, the subject-matter of claim 1 of the first auxiliary request as well that of claim 1 of the third auxiliary request differ from the prior art referred to in section 2.1 above also in that "an output cable is provided for reporting the results of the data processing means outwardly", while claim 1 of the second auxiliary request as well as claim 1 of the fourth auxiliary request further specify that the output cable extends "outwardly from the housing".

3.3 The distinguishing features that the data processing means is adapted "to make knowable the results thereof" and that "an output cable is provided extending outwardly from the housing for reporting the results of the data processing means outwardly" solve not only the problem of providing the farmer with information concerning the health of the animals and/or the quality of the milk but also the problem of how to transmit this information outwardly from the data processing means.

As has been explained, a data processing unit, such as a processor, is usually associated with a display screen and/or a printer by means of an output cable which extends outwardly from the data processing unit for reporting the data processing results to the display device.

Furthermore, in the specific field of milking animals, this basic knowledge is reflected by D9, which discloses a milk analyzing unit (26) comprising a housing in which sensors are arranged and transmitting - via an output cable, which necessarily extends "outwardly from the housing" - information from the sensors to the master unit connected to the printer.

On the basis of this knowledge, the skilled person confronted with the above mentioned problem would provide the first embodiment of D3 (see section 2.1 above) with an output cable extending outwardly from the housing in which the data processing means are arranged for reporting the results of the data processing outwardly (so as to make them knowable) without exercising any inventive skill.

3.3.1 In this respect, the appellant essentially argued that the skilled person has many possibilities for outwardly reporting the processing results, not only by using an output cable or of transmitting/receiving means (as claimed in each of the auxiliary requests) but also by using a display device arranged on the sensor housing or an acoustic warning device arranged in or on the sensor housing.

However, the provision of an output cable is an obvious possibility that would immediately come to the mind of a skilled person aiming at transmitting the data processing results to a display device and the choice of this obvious possibility among others does not render the claimed subject-matter inventive.

3.4 Therefore, the subject-matter of claims 1 of the second and fourth auxiliary requests and *(a fortiori)* that of claims 1 of the first and third auxiliary requests do not involve an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar: The Chairman:

G. Magouliotis M. Ceyte